

GAMERS, HUNTERS, PROVOCATEURS: DIGITAL MEDIATIONS OF VIOLENCE,
GENDER, AND FAITH IN THE ARAB WORLD

by
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Abstract

My dissertation examines how digital media and communications technologies shape responses to gendered violence, human security, and women's rights in the Middle East. I combine discourse analysis with a material investigation of computational media to consider the gendered and racialized dynamics of digital knowledge production about these issues, how this knowledge informs particular forms of intervention on behalf of women in the region, and new global labor networks emerging from the use of everyday technological devices and practices. First, I show how the use of spatial information technologies and crowdmapping applications for addressing sexual harassment in Egypt depoliticizes sexual violence by subordinating Egypt's urban landscape to a visual cartography of crowdsourced data attributing harassment to 'culture,' while simultaneously erasing the role of the state in perpetuating sexual violence. Second, I consider the use of nudity by Arab women as a form of protest on social media to reveal filtering processes that depoliticize images of protesting gendered bodies as they are forced to travel with millions of other flagged pornographic, violent and other disturbing pictures managed by the hidden network of low-wage, off-shore content moderators tasked with managing this new form of 'toxic waste.' Third, I examine how Saudi women gamers use gameplay to transgress gender-based constraints on movement and communication, while articulating alternative discourses of creativity, access, and piety through the practice of gaming as a way to create more relations of

accountability to women in the form of education, employment, and increased access to public space. In sum, the project considers the general properties of digital media including software, algorithms, spambots, and other technical infrastructures alongside narratives, psychic investments, and the tendencies of global flows of capital to show how, together, they produce complex and often conflicted fields of action upon which contemporary geopolitical relations play out.

Committee: Jane Bennett (Chair); Waleed Hazbun; P.J. Brendese; Clara Han; Bernadette Wegenstein.

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Introduction

On January 18, 2012, the Yahoo! Business and Human Rights Program along with Yahoo! Maktoob (Yahoo's official entity in the Middle East) hosted the Change Your World! Cairo Summit, which spotlighted a number of Arab women using social media and other digital platforms to create positive change in the region. The summit was moderated by journalist Mona Eltahawy, who arrived with her arms still in bandages after being attacked by Egyptian security forces while protesting during the 25 January Revolution. Eltahawy stated to the crowd of over one hundred 'Twitter superstars,' 'cyber-activists,' 'fearless bloggers,' and 'social media celebrities' in attendance, as well as countless others tuning into the conference online, "The power of women is in their stories. They are not theories, they are real lives that, thanks to social networks, we are able to share and exchange" (Radsch, 2012). Other women were invited to share their experiences using social and digital media as a tool of activism over the last year, including Danya Bashir, who discussed

using Twitter to document real-time events in Libya to an international audience when journalists had limited access on the ground. “I couldn’t have done this without social media,” Bashir said. The world would not have known.” Exiled Bahraini journalist Lamees Dhaif, noted for having four times as many Twitter followers as the number of readers of Bahrain’s most widely-read newspaper, emphasized the importance of social media to her activist work: “Now people are outspoken because of the tools.” Manal al-Sharif, the Saudi national who helped start the #Women2Drive Twitter campaign, talked about being contacted by another woman online who, inspired by al-Sharif, tinted the windows of her car so she could teach her daughters to drive. At the summit she declared, “We are blessed with the social media.”

The Change Your World! Cairo summit was important for putting a face to what was the most prominently featured aspects of the 2011 Arab uprisings, at least in the Euro-American media, that is, the emerging Arab ‘digerati’ and the increasing use of social networks as a surrogate from of journalism to an otherwise highly censored state-dominated media. Women’s use of digital media in particular has been an integral feature of numerous articles and commentaries documenting the crucial role that these technologies have played in promoting citizen journalism and digital advocacy, and mobilizing the mass movements that brought down four long-standing dictatorships in the region. Certainly many of these women have put themselves at great risk to be part of what will be remembered as one of the most powerful and inspiring events of human history. However, the Change Your World! Cairo summit also put a face to something else: that issues of gender equality,

gender violence, and women's rights in the Middle East are increasingly being thought of as a technological problem that can be solved with the universalization of everyday technical objects and practices.

After years of protracted and unilateralist military interventions in Iraq and Afghanistan, Americans and Europeans have lost their enthusiasm for more direct forms of intervention in the Arab and Muslim world (Mahmood, 2008). However, the imperial impulse to transform Muslim communities into liberal democracies with Western cultural values is very much alive and well. As regional politics 'post' the Arab uprisings have begun to take shape, international organizations are



Fig. 1. Image from the Yahoo! Change Your World summit in Cairo. Source: itpnet.com

seeking to articulate both protracted and new challenges and opportunities for Arab and Muslim women, taking stock of what many people working within

internationalist normative frameworks consider a backsliding of the so-called 'women's agenda' in the Middle East. These issues include the lack of women in elected governmental positions after major political restructuring, gendered sexual violence, a continued lack of access to public space, and lack of economic opportunities, and access to healthcare and education. A number of commissioned reports by organizations like the United Nations Entity for Gender Equality and the Empowerment of Women (UNWOMEN), the United Nations Economic and Social Commission for Western Asia (UNESCWA), as well as a host of others focusing on these issues have highlighted the pivotal role that women have played in the most recent wave of political mobilizations across the region, as well as a series of strategies for sustaining movements for gender equality in the Arab world. The prescriptive vision of this newest instantiation of internationalist thinking about the 'political problem' of Arab and Muslim women foregrounds abstract notions of equality, democracy, freedom, and liberty through religious and cultural reform enabled by social media and other forms of networked communication. The end goal of these interventions is that Arab and Muslims women might either be given opportunities to circumvent restrictive political and cultural institutions, or where such a disposition might be lacking, to be taught to turn away from fundamentalism and support more enlightened versions of social and political change.

For those attentive to the critical tradition of scholarship documenting European feminism's complicity in colonial ventures in the Middle East (Alloula, 1986; Mahmood, 2005, 2008) and its vestiges in liberal feminist interventionism (Puar 2007; Amar 2011a, 2011b, 2013; Abu-Lughod, 2013), the reanimation of

discourses about the incompatibility between religion and freedom and the mistreatment of women as part of a pathology of Islam (Mahmood, 2008) will be quite clear in these narratives, as Western imperialism has always sought to justify its geopolitical adventures on the pretense of 'liberating' indigenous women from culturally-ingrained patriarchy and religious conservatism.

I seek to join this critical tradition by showing how hegemonic discourses about bridging the 'digital divide' as a social, political, and economic imperative, the universalization of international gender norms, and the technics and practices of human security regimes are put into motion through an increasing number of everyday technical interventions that are both digital and networked, and are producing new and undertheorized sites for negotiating gender, religion, race, and national identity. This project also proposes a critical understanding of how communications technologies are situated within a particular historical and political context in their prescriptive role with regard to the so-called 'problem' of Arab women. This places my dissertation in an interdisciplinary conversation with new media studies, antiracist feminist scholarship, postcolonial studies, and critical security studies in my accounting of the relationship between technology, gender and race, as well as the materiality of technical systems.

My project, in part, attempts to illustrate how Western proprietary social networking platforms and other technological devices are presented as delivery systems for the adoption of liberal cultural values, and are thus viewed as the 'cure' for patriarchy and fundamentalism in the Arab world. In my reading of this problematic, everyday objects of technological mediation including Google Maps,

Twitter, TED talks, smartphones, crowdsourcing, email, blogs, messaging, and video games are becoming the new languages of expertise, the new logics of science, and as I will show, the new knowledges of gender and race about the Arab world. Part of the appeal of these forms of mediation is that they are seen as either operating outside the realm of politics, or alternatively, as embodying a kind of pure democratic ethos. This is evidenced, for instance, in assumptions about the neutrality of data as a coherent series of measurable comparisons and goals, the increasing reliance upon Google's mapping interfaces as true and accurate representations of 'offline' space, and in narratives about the rapid rise of global Internet users in the Arab world and the democratic potential of online participation. To the extent that these assumptions inform discourses about women's use of technology, Arab women's struggle against gendered oppression is often read as beginning with the introduction of the Internet, and as singularly focused on local cultural and religious conservatism. In what has been referred to as the 'Facebook/Twitter Revolution' narrative, these accounts embody an underlying techno-centrism (a variation on ethnocentrism) that foregrounds the role of the Internet and other networked technologies in bringing about political change over the people who are using them. Here, liberalism finds its way into these narratives of use and practice by framing all acts of resistance within a singular market driven democratic telos. For instance, in Howard and Hussain's (2013) *Democracy's Fourth Wave? Digital Media and the Arab Spring*, the authors provide a brief yet illustrative sketch of how digital information technologies are thought not only to provide, in their words, "opportunities to redress gender

disparities in developing communities,” but also “a platform for *learning* about gender politics in Muslim countries” (author emphasis, 63). In their account, new communications technologies do several things: they allow women to access new public spaces provided by digital media to challenge, contest, and transgress traditional norms; they give women in ‘conservative societies’ greater economic opportunities by allowing them the ability run private businesses from home; they provide new spaces for women and men to debate gender issues in a ‘culturally sensitive’ context; and they provide ‘women-only’ spaces for talking about politics away from the ‘gaze’ of patriarchal communities and restrictive governments (63). They continue:

There is a growing literature about how exposure to digital media has an impact on users’ levels of tolerance and empathy... for many young Muslims the online social networking applications and other content are the media by which they learn of life in other cultures where faith and freedom can coexist. Networked information technologies are, at the very least, partly responsible for exposing citizens [in the Muslim world] to liberal cultural values.

Certainly some internet users in these countries can be radicalized through their internet use, but many will be sensitized through the internet...One of the next steps in researching the impact of digital media in countries with large Muslim communities will be to investigate the overall impact of internet use on tolerance (63).

Most of the literature challenging the narrative of the liberating impact of Western

technology on the Arab world draws on critical discourse analysis as theory and method. For instance, Marwan Kraidy (2013) has criticized the overemphasis on platforms like Facebook and Twitter for explaining the uprisings, arguing instead for a reconsideration of the body as the most powerful medium of the revolution, and for the practices of embodiment as a form of media including singing, graffiti, and poetry. Others have focused on the technological determinism underlying these explanations, in other words, that something like Facebook drives social and political systems and values, and thus reduces the complexities of these networked and non-networked interactions into a simple cause and effect formula. However, as Saba Mahmood (2011) has asked, if the technology is available worldwide, “why has it seldom been mobilized to serve the ends it is currently serving in Egypt?” Still others emphasize the essential role of the internet for the economic survival of late modern capitalism, as well as the Orientalist tropes motivating much of the commentary surrounding social media as a way to ‘help’ Arab nations to become more developed, modern, and civilized - while simultaneously sidelining or obscuring entirely the historical, political and economic transformations that have shaped Muslim and Arab polities, and which have been just as influential to recent events. These criticisms often take issue with the corporate complicity of proprietary platforms, for instance in Facebook allowing the IDF to monitor Palestinian activists, or the U.S. State Department’s courting of Arab internet activists in places like Egypt and their disregard for activists in countries like Saudi Arabia whose governments are friendly to U.S. regional interests (Aouragh, 2012).

I have been inspired by this literature and I too seek to understand the paradoxical nature of social and political engagements with digital platforms in the Arab world, platforms that simultaneously offer extraordinary opportunities for communication and action while also presenting new ways of controlling people's activities algorithmically, through regimes of surveillance, and through the knowledges about gender and race that they produce. However, whereas this critical literature has focused primarily on discourse analysis, I wish to highlight how technologies themselves produce political effects, in particular gendered effects that challenge technological liberationists account of the use of digital media and communications technologies in the region. Some of the questions I am interested in here include: How do commands, codes, and protocols perpetuate key tropes in contemporary feminist discourse about Arab and Muslim women at the same time that they provide new modes of and opportunities for politics? What distinctive contributions are made by digital networks and mobile communications technologies - as devices that afford some human practices and ideas but not others - to this latest era of Euro-American intervention in the Middle East?

I engage these questions in the following project through combining discourse analysis with a material investigation of embodied technical practices to illustrate how human-computer interfacings are neither socially nor technologically determined. What becomes visible, to this end, is how narratives, devices, and the tendencies of global flows of capital and psychic investment together produce complex and often conflicted fields of action upon which contemporary geopolitics and the exploitative relations of global capital play out. That said, if my approach

makes more visible the ideological as well as the unintended effects of technologies, it also tends to push into the background the quest for human identity and individuality, which is the focus of other critical methods. At times, I leave aside these questions in order to pursue my research objective, which is, to address a provocation put forward by Timothy Mitchell, which is to “account for the powers of techno-science in terms that do not merely reproduce its own understanding of the world” (2002). In other words, I am interested in interrogating capitalism, technology, science and imperialism as an assemblage of forces, rather than as things that hold an internal rationality or logic pointing to some kind of inherent power or force that is given credit for events. My focus on what Deleuze and Guattari call ‘machinic agency’ is not the same as techno-centrism or technological determinism. In fact, I claim quite the opposite. By attending to the materiality of technological devices, algorithms, spambots, geomapping software and video games, I seek to illuminate the fields of action that they co-produce with human bodies at the site of human-computer interfacing. This positions the gendered technological politics of the Arab world as generative of the theories and practices of global communication. Consequently, the project contests the marginalization of Middle East scholarship to area studies, while also providing a grounded, practical analysis of how class, race, and gender inequalities emerge from everyday technologies and digital cultures.

While the ethnographic material presented will focus on a subset of the material-semiotic practices of the ‘Arab world,’ my analysis raises questions and issues that cut across the so-called civilizational divides. This, I think, produces a

series of productive tensions throughout the manuscript concerning the matter of cross-cultural translation. Throughout the project I try to position my arguments not as attempts to give or restore agency to the women I discuss by trying to explain who they really are and/or what they really think, nor do I seek to offer a prescription for how we might go about empowering them in some alternative way. I am not interested in making culturalist claims about Muslim or Arab women. In this regard, the project has an uneasy relationship to its subjects. I chose its three organizing tableaux – the gamer, the hunter and the provocateur - because the technologies that make them possible have been largely presented as empowering and liberating for women. As Jasbir Puar (2008) has argued about progressive cultural politics in the United States after 9/11, rather than accept these technological projects as unquestionably positive we should seek to understand why they are seen as such, and to make theoretical interventions to see if they might be doing violence in less obvious ways.

Organization of the Dissertation

Chapter 1: Gender, Race and Technology at the Site of the Interface

In this chapter I argue that attending more carefully to the non-human, technological contributions to global politics is part of a horizontalization of thinking that may help to lead us out of the binaristic and hierarchical traps that postcolonial theories are actively trying to challenge. My argument is that an intensification of analytic focus at the site of the interface works to break up technocentric and techno-deterministic frameworks addressing the so-called ‘problem’ of

Arab women. It can also help to locate new frontiers for thinking about digital politics by highlighting existing or emerging vulnerabilities that correspond to quotidian uses of technology. I develop the concept of the interface in this chapter as a way to horizontalize actors, technics, etc. and diagram the formation of race and gender at scales and locations largely overlooked by research dependent upon more anthropocentric frames. I use Alexander Galloway's (2012) concept of the 'interface effect' as a starting point for thinking about interfaces as sites of political and ethical contestation. The interface is a way for me to examine the amalgam of 'hard' and social sciences, human systems, computational forms, gender norms, religious organizations, markets and other complex assemblages that self-organize into complex systems with political effects. Computers, smartphones, GIS software and other interfacing technologies appear not simply as objects or as organizations of data, but also as processes of agency. It is along and between these layers that we can trace the relays between the body and the computer in which each is co-produced within a generative frame of racialized and gendered knowledges -- knowledges that have effects beyond their everyday 'practical' uses. My wager is that by attending to the liveliness of technology, that is, a broader range of human and non-human actors at the site of the interface, we can disrupt essentializing and colonizing narratives about Arab politics, that depend on ontological categories treated as having inner dynamics already firmly established, and thus taken for granted.

Chapter 2: The Cartographic Ambiguities of Harassmap.com: Crowdmapping Security and Sexual Violence in Egypt

This chapter provides a critical reading of HarassMap, a project launched in December 2010 as a Cairo-based interactive online mapping interface for reporting and displaying incidents of sexual harassment anonymously and in real time in Egypt. The project's use of spatial information technologies and global navigation satellite systems in order to crowdmap sexual harassment raises important questions about the use of crowdsourced mapping as a technique of global human security governance, specifically what Paul Amar (2011, 2013) has termed the securitization of feminist internationalism. It also helps me to illuminate the techno-politics of interpreting and representing spaces of gendered security and insecurity in Egypt's urban streetscape. I argue that the Harassmap interface offers a vertical solution to the problem of gendered human security through a series of technological interventions that attempt to create new forms of public consciousness. It engages in a kind of aerial targeting to create domains of intervention that are atmospheric, grounded, networked, and global. By recoding Egypt's urban landscape as spaces subordinated to the visual cartography of the project's crowdsourced data, Harassmap obscures the complex assemblage that it draws together as the differentially open space of the Egyptian street – spaces that are territorialized and deterritorialized for authoritarian control, state violence, revolt, rape, new solidarities, gender reversals, sectarian tensions, and trans-sectarian cooperation. What is at stake in my analysis is the plasticity of victimage: to what extent can attempts to empower women be pursued at the microlevel

without amplifying the similarly imperial techniques of objectifying them as resources used to justify other forms of state violence? The question, I argue, requires taking the practices of mapping and targeting to be an interface with political efficacy.

Chapter 3: The Digital Transgressions of Aliaa Elmahdy and Amina Sboui: Facebook Universalism and Politics of Networked Nudity

In October 2011, 20-year-old Egyptian activist and American University of Cairo communications student Aliaa Elmahdy posted nude images of herself on a personal blog, receiving international media attention and making her digital transgression one of the most polemical topics to emerge during the contentious lead up to the first parliamentary election held after Mubarak was deposed. In this chapter I challenge and provide an alternative to the reading of Elmahdy's naked activism as an example of how social media as a Western technological innovation inspires liberal forms of feminist liberation. I attend to the distributive agency between Elmahdy's physical body and the technological apparatuses that enable the production and distribution of her naked intervention across variably coded spaces, both physical and digital. The most prominent non-human actant in this account is Facebook and the technological affordances of its algorithmic and normative protocols. I argue that an attention to these protocols offers a window into how social media depoliticizes content. It does so via content modernation through which Facebook workers determine what is acceptable and unacceptable nudity for its increasingly global community of users. Here I want to politicize Elmahdy's

images and actions in two ways. First, I show how Facebook elides the possibility that gendered naked bodies on the social network constitute a form of politics by coding this 'inappropriate' content as spam. From a content perspective, spam is less about protecting a computer than it is about the bureaucratic management of data in order to separate the meaningful from the meaningless. Thinking about spam as an excess of signification or 'waste' that must be managed leads to my second intervention. Here I trace the flow of these political images of human bodies along with millions of pornographic, violent, and other disturbing images that have also been 'flagged,' from the visible interface to the hidden network of low-wage content moderators tasked with the hazardous and debilitating job of managing these flows. Thus my readings seeks to undo the depoliticization of Facebook's behind-the-scenes filtering by showing how these Arab female bodies travel within the same channels of labor exploitation associated with the electronics industry, and networks of global connectivity. What is revealed is both the exploitative structure of Facebook's employment of off-shore workers, and the production of a new form of 'toxic waste,' the disturbing or 'flagged' content.

Chapter 4: Kingdom of Games: The Digital Heterotopias of Saudi Women

This chapter examines the growing subculture of women gamers in Saudi Arabia, and how their embodied experiences of gameplay present opportunities to transgress gender-based constraints on movement, communication, and access on and offline, while simultaneously disrupting the notions of public visibility and gendered agency put forward by liberal feminism. I draw on a range of thinkers

including Michel Foucault, Donna Haraway, Rosi Braidotti and Ian Bogost to explore how technological interventions in/on the body have the potential to destabilize existing gender norms and representations of sexual difference as gaming interfaces mediate new moves into visibility that exceed Euro- and American-centric preoccupations with the veil and questions of rights. Instead, I argue that this well-organized and transnationally linked group of players and developers utilizes alternative discourses of creativity and piety that create relations of accountability to Saudi women including access to public space, opportunities for employment in predominantly male-dominated industries, and so forth. My reading of Saudi women gamers also 'plays' with the idea of these women as both human and machine, what Jussi Parika (2007) calls "software+biodigital creatures" who/that experiment with sexual difference in worlds of human, animal, insect, and zombie affectivity. On my reading, these women slip between the boundaries of human and non-human, between born and manufactured, and between flesh and metal as they create spaces (within the programmatic limits of the software) for play on/with sexual difference beyond heteronormative reproduction within *gamespace*, which opens itself to new bodily affects and encounters. I consider these propositions in light of the theme of the most recent Saudi women's gaming convention – science fiction - which as a genre has always lent itself to experimental ways of thinking about the impact of technology on sexual difference, to fantasies about the body, and to alternative systems of procreation and birth that give rise of what Barbara Creed calls the 'monstrous-feminine.' These practices produce a field of micro-political

interventions that transgress sexually segregated spaces while simultaneously offering alternative moral regimes.

Chapter 5: Conclusion

In this section I present an overview of how I have critically examined the narrative whereby Arab women are being 'remade' by digital media and communications technologies, and present an appeal to more nuanced accounts of the relationship between gender, technology and social power by looking at the ambivalent effects of networked communication and the rich and multi-scalar appropriations of these technologies by a diverse range of women. I also provide a brief overview of how why I chose the particular cases that I did, and how I see my own subject position in relation this analysis. Finally, I make some suggestions for future thinking about developing an interdisciplinary language for considering questions of coding, protocol, culture and politics together. I argue that while rhetorics of representation and visibility are useful, they should be coupled with an attention to the materiality of technical systems as a way of historicizing and politicizing their everyday use.

Chapter 1

Gender, Race and Technology at the Site of the Interface

How are the technological systems that support interventions directed at the so-called ‘women problem’ in the Arab world coded as gendered and racialized? How does the technology perform this knowledge, and finally, how does an attention to the agentic capacity of technology shed new light on questions of access, participation, meaning, and violence with regard to digital media? My engagement with the notion that technology *does* things moves this dissertation toward a suggestion posed by Jane Bennett (2010), which is that our analyses of political events might change were we to give the force of non-human bodies their due. Like Bennett, I am inspired by Latour’s (2005) attempt to develop a vocabulary for addressing questions of distributive agency between multiple modes and levels of effectivity (viii-ix). From a methodological perspective, one of the key elements of

Latour's project is his concern with the question of *relationality*. He argues that it is necessary to scrutinize more thoroughly the exact content of what is 'assembled' under the umbrella of society rather than focus on those actors, methods and domains already accepted as members of the social realm. If abstract terms like kinship, culture, economy, power, and class are mobilized in an effort to maintain stable frames of reference, Latour offers a form of sociotechnical analysis that attempts to map the materialities that produce relational effects (Law, 2004). This mapping of associations is meant to disrupt established categories of analysis often treated as having inner dynamics already firmly established and thus taken for granted.

My project attends to the way that the categories of Arab, women, liberalism and others wander from their more conventionally designated meanings and referents. These categories are thus best understood in terms of their relationality, or what Harman (2009) describes as "the concrete drama of translations between specific actors" (57). My arguments here are informed by the work of Bruno Latour, Alexander Galloway, Talal Asad, Jane Bennett, Rosi Braidotti, Donna Haraway, William Connolly and Saba Mahmood, who all have helped us to think of semiotic practices beyond the registers of symbolic signification and representation. My approach to the relays between bodies and technologies seeks what Law calls "a sensibility to materiality, relationality and process," rather than a 'theory' or 'methodology.' Following Saba Mahmood's (2005) claim that acts of resistance to systems of domination are but one of the modes of political action, I seek to reveal how non-human materialities have a political force or effectivity working alongside,

within, or against human effort. To do so, I experiment with different languages and disciplines for thinking about modes of agency that exceed liberatory projects, but also agencies that exceed explanations for effects and events that only take human action into account. I reflect upon the kinds of political projects presupposed and constructed by certain digital communicative practices, those politics that these systems challenge, and those that they remain indifferent to. Saudi women gamers, for example, express indifference to politics: “We don’t do politics,” says GCOM founder Tasneem Salim when asked about her views on the Saudi government on her Ask.fm account. This denial of politics can, of course, be intended as a political act. But what is more, there is a political valence to their fields of play and practice, which, in excess of any intentionality, works to transform the ground upon which religious and national projects are envisioned and practiced by women in the Peninsula. My aim is to attend to not only what these practices mean (for instance, why Aliaa Elmahdy chooses to use her exposed body as a form of protest, or why women choose to use Harassmap) but also to the subtle work that something like nude images or digital cartographic representations of sexual violence do to the experience of subjectivity, attachment and community. I try to highlight a material mode of agency, recognizing that people and machines do things to one another, and that neither can be credited as the sole cause of any particular effect.

Critical scholars working on questions of race, gender and technology have helped to move questions about unequal access to digital technologies away from the simple binary question of yes or no to show how access is also gendered and racialized (Nakamura & Chow-White, 2013). These scholars link older claims about

data 'neutrality' to the convention that digital media is free from gender and race bias to show how both narratives work as vehicles in the expansion of global communicative and entertainment markets. The claim is not that digital media are merely tools of Western corporate and political interests, or that women using these platforms are being duped, but rather that certain modes of racial and gendered visibility and knowing are supported by specific ways of organizing data.

Technologized ways of understanding the world have also emerged along fluctuating knowledges about gender and race, which have always served as ideological organizing principles of US and European interventionism in the Middle East. My project adds to this scholarship on race, gender and technology by examining more closely exactly how this happens in select contexts. It is not that technological systems 'think' racially, but rather that they operate according to a set of codes that reflect but also intensify and exceed programmatic and norm-infused beliefs and assumptions about gender and race. As such, I explore the co-production of race, gender and technological computing in international human security responses, in the idea of networked cosmopolitanism, and in the gendered politics of gaming. In each chapter I explore which types of violence these technological mediations obfuscate, and the kinds of violence they condone. The objects of my analysis include the discursive representations of gender and race, the pragmatic effects of the technologies themselves, and most importantly, the way these two kinds of agencies interact.

The human-computer interface is my cartographical starting point for this work, which following the discussion of Bennett and Latour above, I treat as a set of

relations rather than as a neutral device or a set of designed protocols with fixed and predictable effects. Interfaces are often thought of as spaces of demarcation between the body and a technological object, for instance the face of a smartphone, a keyboard, or a computer screen. However, these ‘boundaries’ imply borders, limitations, in other words, a kind of distinction between the engager and what is being engaged. Other scholars have attempted to consider the interface with more emphasis on the ‘inter’ of the interface. This shift in emphasis recognizes how each participant in the interface, human and non-human, is affected by exchange and the flow of information across these spaces. Media theorist Bernard Steigler (2010) has called interfaces “entry and exit organs” that give us access to the networks of industrial memory, highlighting the living, intercalated characteristics of the interface through the metaphor of the body (79). In *Evil Media*, Fuller and Goffey consider the interface as a carefully circumscribed and controlled entity that allows machines and users to engage one another within a precise set of parameters based on complex sets of processing that structure, segment, and formalize quantities considered data or instruction (2012: 78, 89). These processes infiltrate our daily activities, from changing one’s address at the post office, to profiling particular categories of individuals at the airport, to checking one’s eligibility for personal financing. Fuller and Goffey also point to the interface’s adaptive characteristics, and its emergence from the “production of intuition through the automation of behaviors” whether physical, as in the playing of a Wii device, or calculative, for instance with trading stocks and bonds (90). One doesn’t need to relearn the rules of baseball every time the game is played; the interface emerges from the

“development of standardized, readily intuitive materials and systems for working with ideas, objects, properties, and behaviors” (90).

Alexander Galloway (2012) calls interfaces “autonomous zones of activity,” or to put another way, interfaces are not simply things - although they certainly can be - but can more accurately be described as effects that bring about transformations in material states. The idea of ‘interface as effect’ has conceptual value for this project, particularly given the range of forces and objects that the interfaces I consider take account of. To further elaborate on the idea of effect, I turn to Gilles Deleuze (1990) in his description of the effect in *The Logic of Sense*:

“....Sense is always an effect. It is not an effect merely in the causal sense; it is also an effect in this sense of an ‘optical effect’ or a ‘sound effect,’ or, even better, a surface effect, a position effect, and a language effect. Such an effect is not at all an appearance or an illusion. It is a product which spreads or distends itself over a surface; it is strictly co-present to, and co-extensive with its own cause, and determines this cause as an immanent cause, inseparable from its effects, pure nihil or x, outside of the effects themselves. Such effects, or such a product have usually been designated by a proper singular name. A proper name can be considered fully as a sign only to the extent that it refers to an effect of this kind” (82).

In this particular section Deleuze is speaking about the practice of naming or specifying specific scientific phenomena (Gordon, 1991), but it also adds to

Galloway's discussion of the 'interface effect.' Galloway argues that it would be better to understand the computer not in the ontological sense of a definition or possibility, but rather as an ethics: "The computer takes our execution of the world as the condition of the world's expression" (2012: 23). Following this, the computer, the video game console, and geo-mapping software are not simply objects or creators of objects, but are processes and thresholds that mediate between different states or along different surfaces or layers, which themselves are also interfaces (23). In my reading, multiple interfaces interacting on different layers can be seen in the practice of women gamers in Saudi Arabia uploading digital video of their gameplay to social networking platforms like YouTube. Consider for instance, *Alien Adventure*, a game created by a team of women computer science and math graduates led by game developer Samar al Hussein, won first prize in the Educational Game Development competition (GGDC 2013) at the 2013 Girls Gaming Convention in Riyadh. The game features an alien found by astronauts during a space exploration mission who must use the laws of physics to find a way back to her/its home planet. Watching the game played on YouTube reveals what Galloway calls a 'circulation of coherence' that gestures toward both an inside and an outside of the activity of gameplay. Galloway uses this phrase to describe the levels of the 'interface effect' in both Normal Rockwell's *Triple Self Portrait* and Richard Williams' satirical recreation of the painting for *Mad Magazine* featuring its impish cover boy. There is, I argue, a similar experience of circularity and coherence in the *Alien Adventure* video. For instance, there is 1) the interfaces within the game (between the avatar and the clues that appear when the alien does something that does not

correspond to the programmed rules of matter; 2) the player and the avatar; 3) the object of recording and the game/player POV being recorded; and 4) the voyeur or watcher and the YouTube video. Identifying these various layers (and there are certainly many more) allows us to meditate on the interface as a conceptual tool for

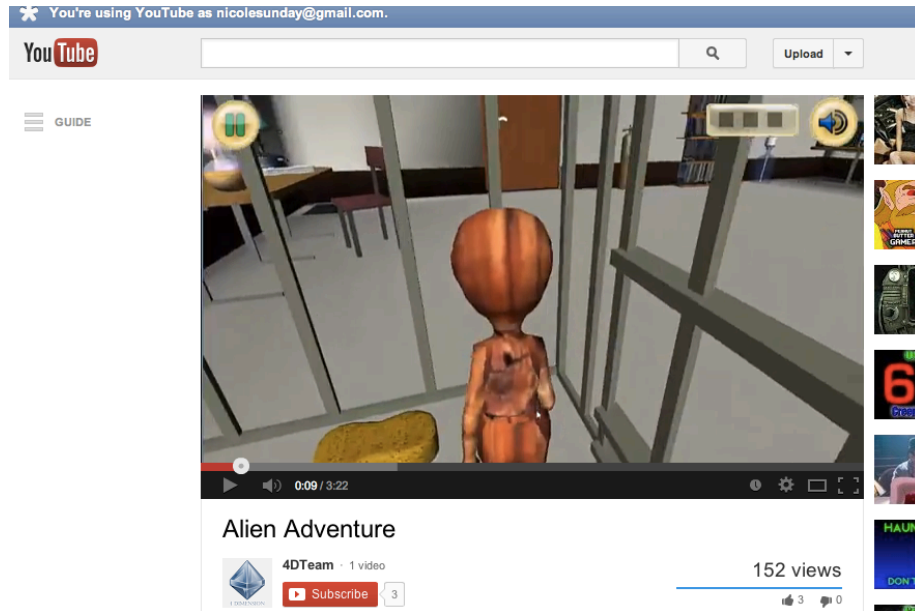


Fig. 2. Screen shot of *Alien Adventure*. Source: <http://www.youtube.com/watch?v=uysaN8jcH0s>. Author screen shot taken November 23, 2013.

locating new frontiers for thinking about digital politics and their multiple effects and fields of action. For instance, both the presence and the absence of the gamer are repeated at various levels, however despite this redoubling the digital-material zones outlined here do not present a perfect representation of the gamer.

While my dissertation considers the presentation and representation of the gamer in the interface, it also maps relations between elements that make up the interface as well as the relations between the interfaces themselves. If we understand computers as a kind of ethics or as politics, then the discourses

surrounding them must also fulfill certain political and ethnical commitments. Interfaces exist in their present form as both the effect and cause of particular material states and specific historical and social relations, and thus “tell the story of the larger forces that engender them” (Galloway, 2012: vii). If the interface is a way to show how Middle East politics is global politics *and* is more-than-human politics, then the point at which we orient ourselves to such a project must consider the interface as a system of things in what Graham Harman terms ‘reciprocal connection’ (2009: 143). Consider Jane Bennett’s (2010) vital materialism, William Connolly’s (2008) ‘evangelical-capitalist resonance machine’, Latour’s (1993) *Pasteurization of France*, and Ian Bogost’s (2006) ‘unit operations’ in game studies. While not necessarily methodologically equivalent, all of these projects or approaches require certain theoretical tools that can address the amalgam of ‘hard’ and social sciences, human systems, computational forms, religious and economic organizations, and other “complex configurations and interactions that self-organize through adaptation and emergence to create structured systems” (Bogost 2006: 7).

Latour’s uses the term *network* to describe the perspective grid that allows us to think beyond the ‘black box’ of a thing or term and consider the relay of mediators that allow us to more accurately explore both the interface and range of forces implicated in its existence (2007: 131). Latour’s actor-network theory is a form of sociotechnical analysis used to map actants and materialities that produce effects, which are often continuously configured and reconfigured in different relational arrangements (Law, 2004). I find the use of the term *network* to describe these heterogeneous and often unstable arrangements conflates actual networks

with metaphoric ones. I also find it to be overly reductionist about heterogeneity and the unpredictability of assemblages, and as such the term overly instrumentalizes these relations. My dissertation uses the term network only to describe actually networked systems like power grids or internet service providers.

Like Bennett (2010), I am drawn to Deleuze and Guattari's notion of *assemblage* for describing these "ad hoc groupings of diverse elements...that function despite the persistent presence of energies that confound them from within" (23-24). Deleuze and Guattari's *assemblage*, and their work on *nomadism* and the *rhizome* are also useful in how I think about the interface as an organizing concept in the project, as they are closely engaged with the history of emergent systems, digital media criticism, unfinished revolutions, and thus offer a unique and useful theoretical framework for thinking about the interface and its interventions in Arab politics. It also helps me to address part of the challenge of this project, which is to be able to think through and talk about 'Arab politics' without it being limited to a geographical or ethnic description. Bogost (2006) points to D&G's "lingering fascination with "mad(wo)men, wanderers and mechanical connections" and their revision of the human sciences as a way of upsetting traditional framings of the subject, the body and language (139). Following this, introducing new sets of actors and relations and mapping the often ambivalent relations between technics and bodies can help us to disrupt essentializing and colonizing narratives about Arab politics that depend on ontological categories treated as having inner dynamics already firmly established, and thus often taken for granted. Giving non-human forces their due encourages a horizontalization of thinking that can help us

out of the binaristic and hierarchical traps that postcolonial theories attempt to challenge.

Following this framing of the interface above, I offer three ways in which we might consider the interface as both a concept and an effect. First, the 'interface' is an allegorical device that can help us to gain some perspective on politics in the Arab world by illustrating its ability to represent an entire range of the social, for instance the interface between the subject and the world, but also the interface between the practice of critique and the object of criticism (Galloway 2012: 54). Wendy Chun's (2004) work is also useful here for thinking about the possible ideological constructions that are operative below the screen in the 'hidden' realm of software. As Chun argues, the operational code of digital apparatuses can show us the "transcoding of symbolic systems," eluding to "the fundamental indeterminacy of the technological apparatus that is grounded in rote, deterministic mathematical coding...not as a socially or culturally significant process, although it is exactly that" (cited in Galloway 2012: 74-75). We are familiar at this point with the opposing narratives of the use of new and social media during the Arab uprisings as either tools of liberation¹ or apparatuses of control. It is not that either position is wrong: only the most cynical person could deny that new media played a powerful role in organizing and disseminating information about the protests that led to the abdication of two long-standing dictators in a matter of days, and only the most naïve would choose to overlook the precarity of the Internet as a system of

¹ For example see Manuel Castells' *Networks of Outrage and Hope: Social Movements in the Internet Age* (2012).

communication and the proliferation of surveillance apparatuses used to track and punish political dissenters online. A focus on software is not a trivialization of either position, but merely an assertion that this is not the entire picture and that something has the potential to be analog for something else.

Second, interfaces are techniques of mediation, or as Galloway (2012) puts it, “points of transition between different mediatic layers within any nested system” through which information moves from one space or entity to another (31). He elaborates further:

The interface is an ‘agitation’ or generative friction between different formats. In computer science, this happens very literally; an ‘interface’ is the name given to the way in which one glob of code can interact with another. Since any given format finds its identity merely in the fact that it is a container for another format, the concept of interface and medium quickly collapse into one and the same thing (31).

Thus the interface always points toward the state of being on the boundary, an effect, or process of translation and knowledge management. Fuller and Goffey’s description of Facebook also fits well with the example of the interface as a technique of mediation. It combines the aggregation of ideas and knowledge in a particular location, the ‘testing’ of the subjects’ ideas and their expression to the norms of the project of Facebook as both process and content, and the propagation of particular forms of knowledge and expression as the interface is produced by a

range of “partially transformable rules, resources, tools, behaviors” and its status as a platform that encourages and facilitates particular kinds of contributions (2012: 92). They also point to the ‘joint project’ that opens up with these relations to the outside, meaning to users who come to feed and read the site, and in the process proliferate particular interests and conflicts. My discussion of Aliaa Elmahdy and Amina Sboui pushes Fuller and Goffey on this idea of the ‘joint project’ of Facebook, in particular its use as a platform for a transgressive politics of exposure beyond a commentary on the incorporation of user content, toward one that examines how Facebook and other globally engaged social media platforms mediate a particular cosmopolitan space online for political expression that obscures local, grounded techniques of surveillance and authority that come into conflict with flesh and blood bodies. This isn’t the tired story that states still matter, but rather an engagement with the various levels and spaces on and offline in which these politics play out. Finally, interfaces are nodal points or ‘strange attractors’ much in the same way that the gates or borders of medieval cities were the foci of “business, trade, sneaking, adulterating, and rumormongering” (92). The interface, in other words, is also an abstraction layer that gathers activity to it.

The following chapters incorporate this concept of the interface in considering how digital media and communications technologies organize particular political and cultural responses to gendered violence, human security, political communication, and women’s rights in the Middle East. The aim is to repoliticize digital platforms and devices often considered neutral by examining how new forms of gendered interventions and new global labor networks are

emerging from use of everyday technological devices and practices. This concept allows me to challenge the view the ideas, technology, and practices of use travel from the global North to the rest of the world, as well as the marginalization of Middle East scholarship to area studies by showing how the gendered and racialized technological politics of the Arab world are generative of theories and practices of global politics and global communication.

Chapter 2

The Cartographic Ambiguities of Harassmap.com: Crowdmapping Security and Sexual Violence in Egypt

In December 2010, Harassmap was launched as a Cairo-based interactive online mapping interface for reporting and mapping incidents of sexual harassment anonymously and in real time in Egypt. Going public concomitantly with the beginning of the mass demonstrations, which have since come to be known as the January 2011 Egyptian Revolution, placed the project in a unique position to address the issue of gendered sexual violence and assault. In the days leading up to former president Hosni Mubarak's ouster, numerous accounts of Egypt's popular protests were presented alongside reports of forced 'virginity tests' and women being insulted, beaten, and raped (Amnesty International, 2013). The issue received heightened international attention with the high profile assault of CBS reporter Lara Logan at Tahrir Square (North, 2011). Media coverage of the assault on Logan often

incorporated culturalist interpretations of mob-style attacks on women protestors and accounts of the 'Arab street' teeming with hyper-sexualized, hyper-masculinized mobs of young Arab men (Amar, 2011). In subsequent months, the HarassMap project received worldwide media attention for addressing the issue of sexual harassment in the country, which has increasingly been portrayed as an 'endemic' problem that is 'deeply rooted' in Egyptian culture and society (see Chick, 2001; Bell, 2012). Harassmap was lauded for helping Egyptian women 'stand up for their rights' (CNN, 2012) and 'fight back against the abuse' (Chick, 2010) of gendered sexual violence through its innovative use of crowdmapping technologies for the purpose of combating what the project calls the 'social acceptability' of harassment in Egypt, not only during protests, but as part of women's daily experience on the street (Gad & Hassan, 2012: 6; see also IDRC, 2013). Says Harassmap co-founder Rebecca Chaio, 'We're the first initiative in the world to implement a digital, interactive harassment map' (Qantara, 2011). Since its initial launch the project received a two-year grant from Canada's International Development Research Centre (IDRC) to study sexual harassment based on submitted reports to the site, and raised more than 25 thousand dollars from a 2013 Indiegogo crowdfunding campaign. Harassmap has also received several international awards including the 2012 World Summit Youth Award, which acknowledges organizations working toward the United Nations Millennium Development Goals, the 2012 Deutsche Welle Award for best use of technology for social good, and a certificate of recognition from the Association of American Geographers 'My Community, Our Earth' partnership.

The idea for Harassmap was developed in 2005 by two women working for the Egyptian Center for Women's Rights (ECWR) in Cairo: Rebecca Chiao, an American and a graduate of the Johns Hopkins Paul H. Nitze School of Advanced International Studies (SAIS) who currently acts as the director of the project, and Engy Ghozlan, an Egyptian women's right activist (Tavaana, 2013). Both women recall experiencing daily sexual harassment on the street as a motivating factor in the project's beginning stages. Says Chiao in an interview with Marwa Rakha for *Think Africa Press*, "One day we looked at one another and said that we all work for a women's rights organization and that we should do something about this!" As part of their work for ECWR, Ghozlan and Chiao began developing an anti-harassment campaign and communicating with other organizations and NGOs addressing the issue. It was at this time that they met two of the other core members of the Harassmap team, Sawsan Gad, a geographic information systems (GIS) data analyst, and Amal Fahmy, who had formerly worked for the United Nations Population Fund (Tavaana, 2013; Harassmap.org). The harassment map was conceived in part with technical assistance from NiJeL, a group that partners with other organizations to create custom systems for data visualization and analysis (nijel.org). Nahdet El Mahrousa, an incubator focusing on 'social entrepreneurship,' currently provides a legal umbrella for the organization to operate within the country.

Harassmap uses the Ushahidi open source 'crowdmapping' platform and FrontlineSMS to create a cartographic representation of incidents of sexual assault that are reported through multiple channels and data streams including SMS texting, email, Twitter and the Harassmap website (Ushahidi; Harassmap). Ushahidi uses

the Google Maps application programming interface (API), which allows Google Maps to be embedded as a base map into the websites of third party developers. As a Ushahidi implementation for geocoding and georeferencing incidents of harassment, Harassmap presents geovisualized data points which represent spaces of violence that are geolocated through positional information reported, for instance, as text within an SMS report.

The project's use of web-based spatial information technologies for crowdmapping instances of sexual harassment in Egypt presents a unique prism for theorizing about the increased interest in and adoption of Google's mapping applications for disaster management, conflict response, and other forms of humanitarian and human security intervention, including those related to gendered sexual violence. My reading of the Harassmap project does not attempt to analyze the impact of the program's mapping and communication campaigns in terms of policy implementation or shifts in general sentiment on the ground with regard to perceptions or experiences of gendered sexual violence. Although I want to acknowledge the admirable intentions of the project's founders and volunteers for attempting to address what is a very serious issue, my interest is focused on what until now has been an unexplored dimension of the Harassmap project: how crowdmapping, understood here as a networked assemblage of different technological devices including global positioning and imaging technologies, mobile phones, and Ushahidi software, is used to produce a particular biopolitical configuration of the Egyptian street. Alone these technological devices are not necessarily biopolitical, but as they work together to aggregate data about sexual

violence, and they create the conditions of possibility for forms of population management through the ‘targeting’ of dangerous people, dangerous streets, and dangerous neighborhoods.

While spatial information technologies have deeply militarized roots, they are, like all technologies, ambivalent and contingent in how they organize knowledge (see Coutard and Guy, 2007: 714; Burns, 2014). This is evidenced in the increasing public use of these technologies through platforms like Google Earth and Google Maps. A growing number of scholars have begun to consider the use of geospatial technologies and mapping platforms in theorizations of geopolitics and visibility (Weizman, 2002), urban life (Graham & Hewitt, 2013), critical geography (Elden, 2009, 2013; Crampton, 2010) and humanitarian intervention (Parks, 2009; Crutcher & Zook, 2008). Burns (2014) defines digital humanitarianism as “the enacting of social and institutional networks, technologies and practices that enable large unrestricted numbers of remote and on-the-ground individuals to collaborate on humanitarian management through digital technologies” (52). Writing about the use of GIS in digital humanitarianism, Burns argues that the reliance on remote processing, aggregation, and the representation of user generated data results in each program or project also producing its own form of knowledge politics (Burns, 52; see also Zook et al 2010; Brabham 2008). For example, Lisa Parks’ (2009) essay on Google Earth’s ‘Crisis in Darfur’ project shows how mapping platforms mediate affective visual-cartographic arrangements of satellite imagery, war photography, graphic narratives, and human rights monitoring meant to provoke particular responses and preface particular geopolitical agendas (537). The use of Google

Earth in creating both a knowledge politics about Darfur and the publics for this information is an example of what Burns calls “moments of closure” in which certain forms of knowledge politics become temporarily ‘fixed’ in the software, hardware, and social practices of particular technologies (2014: 52).

Following this, Harassmap’s specific configuration of data collection, processing, and representation produce a particular knowledge of targeting that resonates with other projects of securitization. As such, the project has more in common with forms of scopic engagement imbued in unmanned aerial vehicles (UAVs) than, for instance, how the same technologies are used for identifying the number of post offices within a three-mile radius. I am interested how scholarship on the ethics of precision in contemporary war, specifically aerial warfare, has relevance for thinking about Harassmap’s use of crowdmapping for generating criminalized subjects and spaces in need of intervention. Zehfuss (2010) argues that precision targeting has made warfare more ethically acceptable because precise targeting is assumed to incur less collateral damage (544). The acceptability of intervention is justified here by the ability for precision weapons to identify, locate, and ‘hit’ particular targets with accuracy while minimizing incidental damage. I want to suggest that a similar ‘ethics of precision’ is evident in narratives that celebrate Harassmap’s innovative use of technology, and its ability to target both individual harassers, whose pictures are uploaded to the site via smartphone cameras, and in the visual and statistical identification of ‘hotspots’ on the harassment map.

As with any evaluation of precision targeting, one needs to consider the question of incidental violence. The incidental violence of Harassmap, I argue, turns on what I call the plasticity of victimage. What I mean by this is to the extent that Harassmap seems unequivocally positive, its location of the problem of gendered violence in Arab culture, its reliance on the trope of victimhood, and its appeal to both international organizations and local law enforcement are implicated in a project of population management that works ‘through’ an assemblage of actors, objects, and affects that animate colonial archives of sexuality and ‘Arabness.’ As these archives resonate within new techniques of mapping and targeting, the project produces a series of tensions through demands for the expansion of the state’s policing powers, and thus more punitive sanctions for harassers emerge amidst crackdowns on anti-government sentiment, new prohibitive laws on public assembly, and the sexual torture of women arrested for protesting while in state custody.

This article presents an alternative reading of Harassmap that engages these tensions. First, I begin with a discussion of the Harassmap project itself, how the interface functions, and then position the organization in relation to other international and domestic NGOs working on gender issues in Egypt. Second, I consider how the Harassmap interface presents a ‘vertical solution’ (Weizman, 2002; Crampton, 2010; Graham, 2004, 2011, 2013; Elden, 2013;) to the problem of gendered human security through a series of technological interventions that attempt to create new forms of public consciousness. Here, Harassmap employs a politics of visibility whereby its mapping interfaces present a picture of the world

through which particular political landscapes are made sensible. As a Ushahidi implementation, Harassmap's interfacing with Google Maps allows the project to engage in a kind of aerial targeting of harassment, creating a domain of intervention that is atmospheric, grounded, networked, and global. Finally, I argue that by recoding Egypt's urban landscape into spaces subordinated to the visual cartography of the project's crowdsourced data, Harassmap recodes and flattens the complex assemblage that it draws together as the differentially open space of the Egyptian street – spaces that are territorialized and deterritorialized for authoritarian control, state violence, revolt, rape, new solidarities, gender reversals, sectarian tensions, trans-sectarian cooperation, and so forth.

Leszczynski and Elwood (2014) accurately note that Harassmap highlights how the spatial navigation of urban life is never a frictionless terrain of movement for women, but is always gendered and sexualized and must therefore be negotiated to minimize the possibility of violence (4). My analysis of Harassment asks us to consider how the implementation's representation of space is also racialized, and also how the project is skewed toward a particular internationalist interpretation of gendered space that relies on a liberal 'rule of law' framework that is highly problematic given the role of the Egyptian state in the creation of a climate of sexual terror as a form of political retribution and intimidation. Without discounting the potential ameliorative effects of Harassmap or dismissing the intentions of its founders and participants, I do wish to bring to light how the Harassmap implementation appeals to cultural explanations of sexual violence in the Arab world that resonate with an ethics of precision that has filtered into realms of human

security and public consumption as satellite and imaging technologies become part of our everyday experience of *other* space. Ultimately what is at stake in my analysis is this: to what extent can attempts to empower women be pursued at the microlevel without amplifying the similarly imperial techniques of objectifying them as a resource used to justify other forms of state violence? The question calls for a close analysis of the practices of mapping and targeting as interfaces for securing public space. Ultimately we must consider the degree to which seemingly progressive uses of these technologies can exceed the martial logic of their origin.

Security, Devices, Governmentality

In the following section I explore how Harassmap makes a set of techniques available to reorganize concerns about development and modernization toward a gendered security paradigm that is invested in both feminist internationalism and free-market transnationalism. By feminist internationalism, I mean the move toward defining universal and measurable criteria to improve the conditions for women globally in a range of areas including health, education and economic opportunity. These benchmarks, in particular those having to do with sexual harassment and sexual violence, are increasingly being thought of in terms of surveillance and policing in UN gender discourses, which will be explained later in the section. By free-market transnationalism, I borrow from Sparke (2006) to define it as “the incorporation of economic imperatives that involve increasingly transnational capitalist interdependencies and the associated entrenchment of transnational capitalist mobility rights through various forms of free-market re-

regulation” (153). Here neoliberalism is described not as an abstract ideology, but rather as a set of contextualized and contingent practices of free-market governance, which often incorporate illiberal forms of political and social management (153). Within this gendered security paradigm, what I am tracing is how the confluence of these two interests resonate with security as a form of governance. To pose this problematic another way, how do the goals of the advancement of women and the expansion of market reason come to inhabit the practices of sexual security? I find some assistance in Michel Foucault’s description of the emergence of security as a political problem that then becomes a technique of governance, or what he describes as “a general economy of power which has the form [of], or which is at any rate dominated by, the technology of security” (2007, 11)

In *Security, Territory, and Population*, Foucault recounts the emergence of security as a problem of the management of populations. Famines, disease outbreaks, floods, and overcrowding all challenge the will to order necessary for the governing of economic life in the city. Out of this ‘disorder’ emerges the necessity of the police as an organ of governance. However, it is never just the citizen or the denizen that must be policed and therefore governed. As Foucault recounts through the work of Guillaume de La Perrière, policing requires the right disposition of ‘men and things,’ or what Foucault discusses throughout the lectures and subsequent essays on governmentality, the *government of things*. (96, 97) In this network of contingent interventions, technological innovations, and spatial arrangements, life and the living are organized “so as to lead to a suitable end” (96). In the case of the

city, that end for Foucault was economic growth, or the success of the management of poverty and labor. Here, the police as agents of security are inserted in a diagram of power that no longer resembles discipline. Whereas discipline, according to Foucault, “allows nothing to escape... The apparatus of security... lets things happen... The function of security is to rely on details that are not valued as good or evil in themselves, that are taken to be necessary, inevitable process, as natural processes... in order to obtain something pertinent... in themselves because [they are] situated at the level of population”(45). Thus rather than focus on the identity of an one ‘subject,’ governmentality takes up the problem of the aleatory, or the uncertain, as the space of security and its milieu of people, towns, and things (11).

In a single stroke, the complexity of urban space, the problem of productive life, and the necessity to organize the flows of commerce give way to a new kind of political subject. According to Foucault, with this new police state “the government begins to deal with individuals not only according to their juridical status, but as men, as working, trading, living beings” (1988, 156). The problem of the population is no longer a problem of compliance, meaning discipline. It is about the organization of people, places, and things that allows for the correct outcome. Thus the emergence of the security dispositif is biopolitical in the sense that it takes life as its object. However, unlike discipline’s attention to particular bodies, security as governmentality and governmentality as security takes as its object whole populations within a milieu, and the state is replaced by an art of government with the objective of creating a particular desired outcome. Security thus brings the difference between sovereignty and governmentality into sharp relief. According to

Foucault, rather than having an essence or authority, governmentality is invested “in manipulating, maintaining, distributing, and re-establishing relations of force within a space of competition that entails competitive growths.” (2007: 312)

Extending Foucault’s insights to my evaluation of Harassmap, I argue that the streets of Egypt are such a space in which the highly sexualized bodies of Egyptian men and women are tracked, tagged and coded in ways that seem innocuous, but in fact fall into a *dispositif* of security that renders all data useful in ‘manipulating, maintaining, distributing, and re-establishing relations of force’ (312). Following this, Harassmap cannot help but produce new data streams about the Egyptian population that can be redeployed by the matrix of liberal feminism and neoliberalism that enliven the transnational and domestic security *dispositif*. Paul Amar describes this phenomenon of UN-affiliated NGOs working locally on the issue of harassment within “a middle-class, law enforcement-centered rescue-protection framework” (2013: 214). My reading of Harassmap pushes Amar’s analysis further into the *government of things* described by Foucault. That is, the technological production of a framework for security and the role of technical devices – specifically, the technological assemblage that enables the crowdmapping of incidents of sexual harassment—in the ordering of a population.

We can neither graft Foucault’s account of 18th century France onto the streets of contemporary Cairo, nor declare these new technological assemblages as unprecedented. Instead what I am arguing is that innovative techniques of governmentality, under the thrall of biopolitical management, mobilize and mutate older epics of racial and sexual knowledge. As such, technological devices,

crowdsourcing, private enterprises such as mobile phone companies, datasets, satellite imaging, and international organizations become imbued with colonial legacies and the particularities of the Egyptian urban milieu to define a unique repertoire of human security interventions where social, political and cultural life can be reduced to a set of calculations and codes. In drawing on the conceptual framework of Foucault and others working on the problem of governmentality and biopolitics, I wish to translate this work into the network of actors, devices, and affects that constitute the Harasmapp campaign, that how these elements are implicated in the neoliberalization of governance and citizenship in contemporary Egypt.

Harassmap, Crowdmapping and Laboratories of Securitization

In *The Security Archipelago* (2013), Amar argues that the spaces in which gendered human security regimes operate in Egypt form ‘a crucial laboratory’ for experiments with an assortment of emancipatory and repressive securitization practices that shape what he calls ‘contemporary gender-sensitive security states’ (204). I draw on this idea of the ‘laboratory’ for thinking about Harassmap in light of the emerging alliance between UN gender norms as a human security priority, and the increasing move toward crowdsourced mapping by international institutions as a strategy for disaster management and human security governance. These systems work together at the intersections of technology, calculation, and affect to produce two separate yet interfacing configurations of security governance. The first relates to the production of a particular kind of cultural security and social

hierarchy that marginalizes class-based mobilization, and instead highlights the proper female citizen as a law-enforcement centered and gendered consumer marked by class (Amar, 2013: 128). The second form of ordering relates to the creation of what Jasbir Puar (2007) terms 'data bodies', or bodies materialized through algorithms, statistics and data streams that are racialized and sexualized through the information they assemble (107).

Originally created for the purpose of mapping reports of violence in the aftermath of the 2008 Kenyan elections, Ushahidi has since been used by numerous organizations to collect information about and create cartographic representations of crowdsourced reports on various issues, including those related to sexual violence and assault. In what appears to be a growing trend, other organizations have adopted the Ushahidi platform specifically for georeferencing crowdsourced data on gendered violence, including the Women's Media Center's Women Under Siege site, which documents reports of sexual assault in Syria (womenundersiegesyria.crowdmap.com), Geographies of Violence Delhi (govdelhi.crowdmap.com), and the Open Institute for Gender Based Violence in Cambodia (open.org.hk).

Individuals reporting incidents of sexual assault to Harassmap are prompted to assign the incident to a particular category of harassment provided by the site (touching, rape, catcalls, etc.), the location of the incident, a summary of what happened, along with a series of demographic indicators including age, gender, and level of education (Harassmap). These reports are reviewed by the Harassmap team and then geovisualized as a geographical data point over Google Maps in the form of

a red dot that can be aggregated or individuated depending on the position of the zoom toggle (Fig 3). The purpose of the harassment map is to present a sweeping

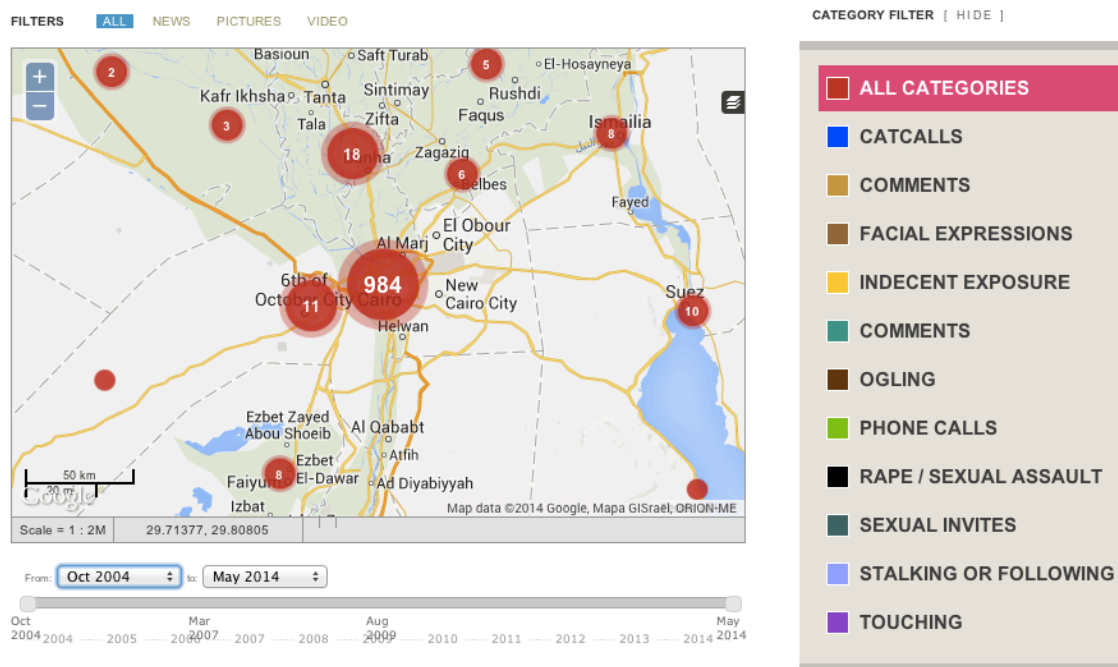


Fig. 3 Harassmap. <http://harassmap.org/en/what-we-do/the-map>
Screenshot taken by the author. May 2, 2014.

and multi-scalar view of the cultural condition of Egypt's so-called 'social acceptability of harassment' (Harassmap). Its multiple filtering options for refining the presentation of data (including date, type of harassment, reports linked to video and/or images, etc.) reinforces the perception of the map as both totalizing and infallible in terms of its ability to penetrate and surveille a particular space. Harassmap's research team regularly reviews the map to identify 'hotspots' reflecting higher numbers of reports, where community organizers and volunteers deploy communications campaigns aimed at encouraging action against sexual harassment in accordance with a series of guidelines provided by the organization for addressing harassment on the street and in the workplace (Rissman,

2014). Chiao states that the outreach program takes what she calls a 'social approach' to addressing harassment: "We do direct interventions to rescue the women, but in our normal long-term work we target bystanders to intervene" (Tillet, 2013). Harassmap has ten full-time employees at the time of writing, and claims over 1000 volunteer members for its community outreach program (Rissman, 2014). These volunteers are trained to speak with 'locals' including shop owners, vendors, police, and those with a visible presence on the street. Printouts of the map are made available during these outreach campaigns to demonstrate 'proof' of the problem as endemic to a particular area (Harassmap). Those with whom Harassmap makes contact are asked to sign an agreement that they will intervene when acts of harassment occur according to the guidelines provided by the outreach team, and in instances where people are reluctant to sign a document, Harassmap reads this contract to them, asks them for a verbal agreement, and signs it on their behalf (Rissman, 2014). Harassmap also encourages shop owners who have signed the pledge to put stickers in their windows indicating their support for the project, with the promise of potential revenue generation and as a visual marker of Harassmap's ubiquitous presence on the street.

Harassmap's politics of policing sexual harassment illustrates its use of spatial information technologies for panoptic surveillance as its techniques are dispersed and internalized through these 'justice entrepreneurs' – individuals who are now tasked with the obligation to protect themselves and their neighbors via new individuating technologies that shift the locus of social change from states to individual 'victims' within a cultural rescue framework. The techniques described

above allow us to situate Harassmap within a particular system of UN-recognized feminist campaigns identified by Amar (2013) that emerged between 2003 and 2010. These campaigns rejected class-conscious movements for social change and instead focused on cultural explanations for gendered sexual violence.

Organizations working within this framework called for an intensification of policing on the streets to combat harassment, and promoted campaigns geared toward 'social respectability' that facilitated 'securitized and militarized appropriations of internationalist gender and security interventions' (204). For example, Harasmap's 2010-2012 annual report, which despite acknowledging that some instances of sexual violence reported to the site were committed by Egyptian security forces, focuses its criticism of the police and military solely in terms of a lack of presence and/or willingness to intervene (Gad S & R Hassan, 2012: 6, 9).

Chiao has also advocated in numerous interviews for increased policing on Egypt's streets as part of an integrated campaign to fight sexual harassment: "We're also going to give the map to the police, who want to increase their activities against sexual harassment but still don't have a system for finding out exactly where the incidents tend to happen. The map will reinforce the protection of women, especially in so-called "hot spots" (Shibib, 2011). This position, which emphasizes culturalist portrayals of Arab men as inherently predatory, ignores how the Egyptian security state has institutionalized sexual violence against women and men as a way to undermine political dissent (Amar, 2013; Slackman, 2005; Allam, 2014).

Amar traces the development of the legislative language around sexual harassment as a human security priority within UN gender discourses beginning in October 2000 with UN Security Council (UNSCR) Resolution 1325 on 'Women, Peace and Security,' which was designed to 'mainstream gender' into practices of peace and security among member states (citing Cohn et al, 2004: 130). UNSCR 1325 was incorporated into the 2005 United Nations Development Program's 'Arab Human Development Report', which identified the problem of sexual harassment and the discriminatory dispositions of Arab men as a human security concern. It is worth noting here that the Egyptian state also used UNSCR 1325 in 2009 as a precedent for consolidating executive powers and increasing security during civil unrest for the supposed purpose of protecting women from street harassment (302). Referencing Sally Merry (2003: 943), Amar describes the Convention on the Elimination of All forms of Discrimination Against Women (CEDAW) as 'a cultural system whose coin is admission into the international community of human-rights compliant states. At the heart of this legal process of monitoring this international human rights convention is the cultural work of altering the meanings of gender and of state responsibility for gender equality [through which] national and international NGOs...shame noncompliant governments [whose] sovereignty was increasingly defined as contingent on its human rights performance' (2013: 302). Harassmap draws directly on these UN gender doctrines and CEDAW institutions, funds, discourses and legal-juridical mobilizing strategies; two of its four core members have worked for the UN, and the project has a standing relationship with the UN's Safe Cities Project. As Amar (2011) shows, these examples 'mark the continuing

metamorphosis from the ambit of war, genocide and state terror towards the sphere of morality, personal attitudes and quotidian class/gender violence' (302).

This research provides a valuable context for considering the use of geo-spatial technologies in the ordering and management of urban Arab populations. Turning now toward the technology of crowdsourced mapping, we can see how it too is emerging as a preferred technique within global human security governance. Take, for example, UN General Assembly Resolution 61/110, which established the UN Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER) on December 14, 2006 (UN, 2014). The stated goal of UN-SPIDER is to provide 'universal access to all countries and all relevant international and regional organizations to all types of space-based information and services relevant to disaster and disaster risk management' (UN, 2014). In 2011 the UN General Assembly Committee on the Peaceful Uses of Outer Space released report AC105/1007, which emphasized the importance of crowdsource mapping facilitated by spatial technologies, satellite imagery, telecommunications satellites and global navigation satellite systems for disaster management and acknowledged the importance of collaborative ventures between UN-SPIDER and its Volunteer and Technical Communities (V&TCs) including Ushahidi, Google Mapmaker, OpenStreetMap and CrisisMappers (UN, 2011).

It is important to note that crowdsourcing was born in user-generated advertising content and online commercial competitions. The term was coined in a 2005 Wired article to describe 'a new web-based business model that harnesses the creative solutions of a distributed network of individuals through what amounts to

an open call for proposals' (Brabham, 2008). Favorable accounts of crowdsourcing as a method for generalized problem solving through online collaboration are motivated on several levels, although two in particular stand out. The first relates to techno-optimistic discourses of digital media and networked communication. These tie democratic participation to information access and link political change or resistance to globalization and technological progress. The second relates to the 'wisdom of crowds' thesis, or the notion that optimal solutions to problems can be derived from an aggregation of data generated by multiple participants (Brabham, 2008: 81). Wikipedia is perhaps the most notable example of online crowdsourcing, although it has been applied in many ways, from raising funds for start-up companies to social bookmarking platforms like Digg, to solving complex scientific problems as was done by the University of Washington when it asked gamers to decipher a protein structure that replicated an AIDS-like virus to help in the design of antiretroviral drugs (Burke, 2011).

Ushahidi is an example of how advances in software, mobile technologies and geo-spatial data collection and interpretation have facilitated the move of geodata collection from commercial uses to crowdsourcing data for human security governance. Crowdmapping has become increasingly popular for addressing what Ushahidi co-founder Erik Hersman calls the problem of 'wasted crisis information', which he explains as an ability to 'produce' crowdsourced reports in excess of the ability to 'consume' them (TED, 2012). We can infer here that Hersman means that the data collected via crowdsourcing often exceeds the ability to use it for disaster response, but his language of production and consumption is also telling.

Crowdsourcing – whether used for a laundry detergent commercial contest or getting clean drinking water to people after an earthquake – speaks to a particular kind of relationship between space and calculation that contributes to a phenomenon that Crampton and Elden (2006) call the ‘mathematization of the subject’ (681). Following Osborne and Rose (2004), they argue that this model of population management based on ordering, ranking and measuring relies on a model of rationality that makes space “amenable to thought” (681). Consider this insight in the context Harassmap’s ability to differentiate between types of harassment and their degrees of violence in order to manage the level of response. As of April 2014, Harassmap’s categories of harassment include catcalls, comments facial expressions, indecent exposure, comments, ogling, phone calls, rape/sexual assault, sexual invites, stalking or following, and touching. The coding of the different types of sexual harassment, of the number of incidents, and of their precise location speaks to Harassmap’s own projection of the relationship between space and calculation to so-called victims and perpetrators that allow the project to produce through crowdmapping a particular visualization of urban life in Egypt. Here geo-spatial technologies become tools for Harassmap’s unique form of population management around statistical inferences about sexual violence. Because the reports present a flattened, depoliticized ‘target,’ these inferences both reflect and reinforce existing racial and cultural attributions that remain distinct from questions of economics, inequality, austerity policies, geopolitical relations, international arms trade, and monetary and fiscal policy. This particular form of calculation has resonances with Duggan’s (2002) description of neoliberalism as a

kind of depoliticized and decontextualized 'non-politics,' where free-market capitalism and liberal forms of governmentality are seen as reasonable and universally applicable forms of economic and political organization for world (177). Wendy Brown (2003) also notes, neoliberalism aims to produce 'all human and institutional action as rational entrepreneurial action, conducted according to a calculus of utility, benefit or satisfaction against a microeconomic grid of scarcity, supply and demand, and moral value-neutrality' (9). Crowdsourcing is an institutional practice that is an outgrowth of our contemporary political and economic condition, where 'all aspects of social, cultural and political life can be reduced to such calculus' (9).

The illusion of transparent space and an all-seeing vision has been described elsewhere by Donna Haraway as the 'view from nowhere' (1988; see also Rose 1997). Given that sexual violence is not the traditional way that political geography 'situates' knowledge, Harassmap does appear to present a feminist cartography via crowdmapping. However, the imperial masculinity inflected in the compulsion to codify and classify the world, as well as the assumed transparency of space and its accompanying claims to universal and impartial categories is, in fact, the flip side of this cartography. On my reading, the project does not appear to engage working-class Arabs, alternative feminist movements within the country, or movements mobilized around class in the building of categories and the assignment of names in the process of mapping. This leads to a privileging of Western international norms, and a middle-class and consumerist understandings of public space.

Mapping Gender Securitization in the Volume

In Eyal Weisman's (2002) work on the 'politics of verticality', he argues that cartographic representations of law and politics are often presented as a two-dimensional reality, which has the effect of flattening and homogenizing spaces of securitization and intervention (3). He argues instead for a consideration of the vertical dimensions of cartographic practices and techniques that reimagine space as a 'territorial hologram' in which political manipulations of territory and claims to property, law and sovereignty are extended along and through 'vertical planes...from the center of the earth to the height of the sky' (2). Weizman's work compliments the imagining of territory as *volume* (Virilio, 1994; Crampton, 2010; Elden, 2013), a perspective that takes into account height and depth in a three-dimensional picture of the terrain of security.

The notion of terrain as volumetric is incorporated in a provocative range of scholarship on the vertical dimensions of security. (Adey et al, 2010, 2011; Elden 2013, Graham 2013; Williams 2007; Zehfuss 2011) and on the more overtly militaristic control of aerial space (Williams, 2007; Gregory, 2011; Adey, 2010). However, the aerial politics of domination are not always overtly militaristic. The use of mapping and geo-positioning technologies also engage the vertical dimensions of territory, highlighting new spheres for intervention and new spaces of vulnerability. In the following section I will explore the way Harassmap uses mapping as a territorial strategy to capture and redefine the policing of urban sociality as a three-dimensional space. Here I seek to show how the securitization of feminist internationalism dovetails with practices of aerial targeting (of individuals,

streets, neighborhoods, even whole ‘cultures’) not altogether dissimilar from what Wall and Monahan (2011) call the ‘drone stare,’ that is, a form of surveillance which abstracts life on the ground and reduces difference, variation and ‘noise’ in an effort to achieve a strategic advantage through systems of verticality (239).

The ability for Harassmap to approach the problem of sexual harassment from an aerial perspective is dependent upon an assemblage of devices that are atmospheric, grounded and networked, thus enabling a multi-scalar view of territory that works concomitantly with other practices of securitization. Thus we should consider the use of crowdmapping platforms alongside those strategies used to secure aerial space including satellite imagery, Google Earth and Google Maps, urban verticality, military surveillance and ‘targeting’ from the air.

Graham and Hewitt’s (2013) work on what they term ‘Google Earth urbanism’ highlights a series of useful vantage points from which to consider Harassmap’s ‘vertical solution’ to the problem of sexual violence. In their account, global satellite imagery, digital cartography, geo-spatial data collection, street level digital imagery, social media and other data and software that make up Google’s mapping interface are combined as an “always on” interactive datascape. These mapping platforms become ‘a flexible and multi-scaled portal through which urban life can be enacted, mediated and experienced in profoundly new and important ways’ (citing Scott, 2010). The increasing public access to these technologies is reshaping our relationship to the world as one that is becoming ‘radically accessible, zoomable and pannable in a myriad of mobile and (near) real-time ways’ (75).

The satellite images that Google's mapping applications provide were impossible to see a short while ago, either because the US military had not released the technology of the zoom to the public or the patchwork of images that make up Google's archaeological record of space and terrain simply did not exist (Kurgan, 2013). Providing a detailed account of the trajectory of events that led from the transition of satellite images from state secrets to commonplace everyday instruments, Kurgan (2013) considers the Clinton administration's use of classified satellite and aerial photographs of execution sites in Bosnia to the United Nations Security Council in 1995 (21) and the New York Times inaugural use of before and after satellite imagery in 2000 to depict that role of the Chechen war in the Russian presidential campaign of the same year (21-22). These examples illustrate how in the last two decades, we have come to live in a world where, as Kurgan explains, 'it is not only a reasonable working assumption that major events could be monitored from outer space, but that the traces of that surveillance would appear in the public sphere' (24).

Today the influence of Google Maps in creating global representations of place cannot be overstated. Google is the world's most used search engine and Google Maps was the most used app among global smartphone users in 2013 (comScore; GlobalWebIndex). These statistics alone speak to the dominance of Google's mapping applications as a source for online spatial information. The fact that Google does not itself produce any of its own aerial images, instead acquiring them through various commercial entities and governments that produce satellite imagery (Parks 2009; Kurgan, 2013) does not diminish the fact that 'any distinct

spatial patterns within uploaded information have the potential to become real and reinforced as Google is continually relied on as a true representation of the offline world' (Graham and Zook, 2011: 115).

Roger Stahl's (2010) discussion of aerial representations facilitated by Google Earth provide some insight into how similar aerial representations of space produced through the Google Maps API create a new kind of public consciousness through a particular 'aesthetics of visibility' that make certain kinds of knowledge visible while obscuring others (67) Following Stahl, the layered regimes of visibility, access, and control embedded in these interfaces speak to Harassmap's use of geospatial data for targeting, as well as the use of the harassmap map as irrefutable evidence that sexual harassment is happening in a particular locale. As co-founder Rebecca Chaio notes, "It's so easy to zoom in... make a printout of the map and bring it to people in the streets and show them, *this is our neighborhood*." (Author emphasis; IDRC). Crowdmapping together with the delegation of on-the-ground outreach activities make visible a particular interpretation of Egyptian urban sociality that is not only reflected in but is also defined, and even conjured, by different interfacing technologies, aerial images and digital representations of violence. Thus, more than a digital depiction of an existing reality on the ground, Harassmap aims to shape the spaces it claims to represent.

Harassmap as a tool for mapping sexual violence in real time is only possible because of today's real-time zoom, from the entire surface of the Earth to a single individual on the ground. Through its interfacing with the Ushahidi platform the Harassmap website is able to present a totalizing picture of incidents of sexual

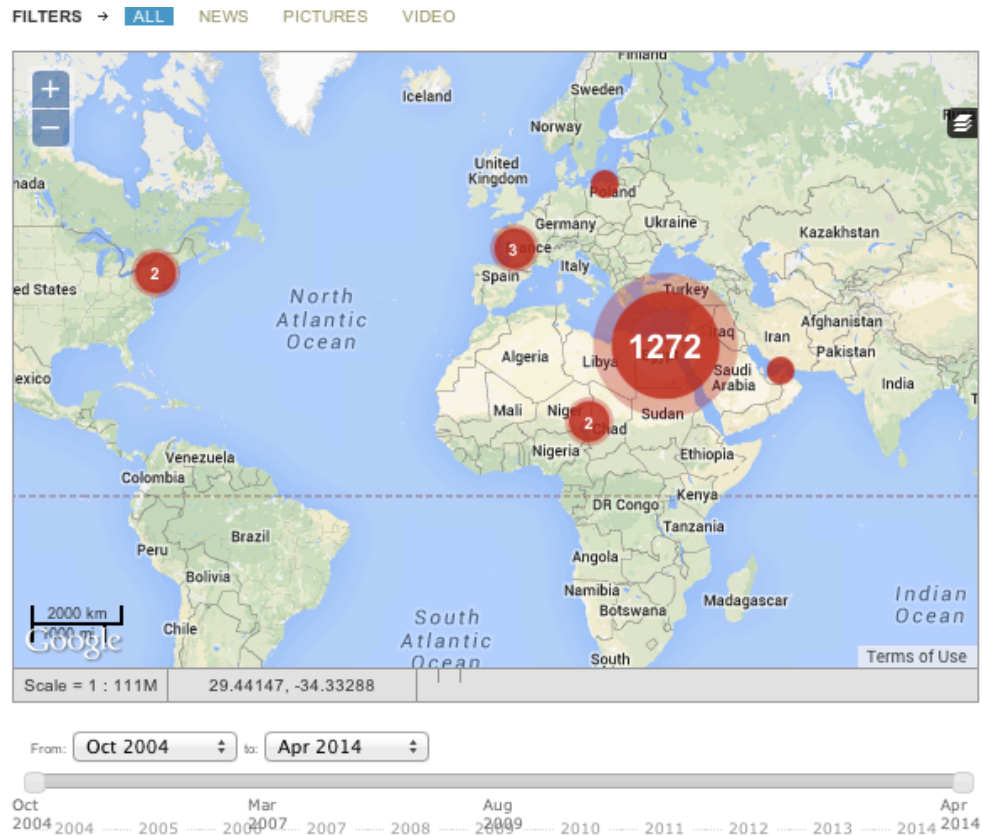


Figure 4. Harassmap.org/en
Source: Author screenshot. April 12, 2014.

violence from 2004 to present day as a comprehensive and filterable set of geo-spatial data points organized along a uniform spectrum as it smoothes over the varying origins, sources, motivations, and contexts that belong to the patchwork of individual reports and news that comprise this archeological record.

Harassmap claims to represent the material conditions of sexual violence and assault on the ground through its ability to zoom in and out of a series of frames to

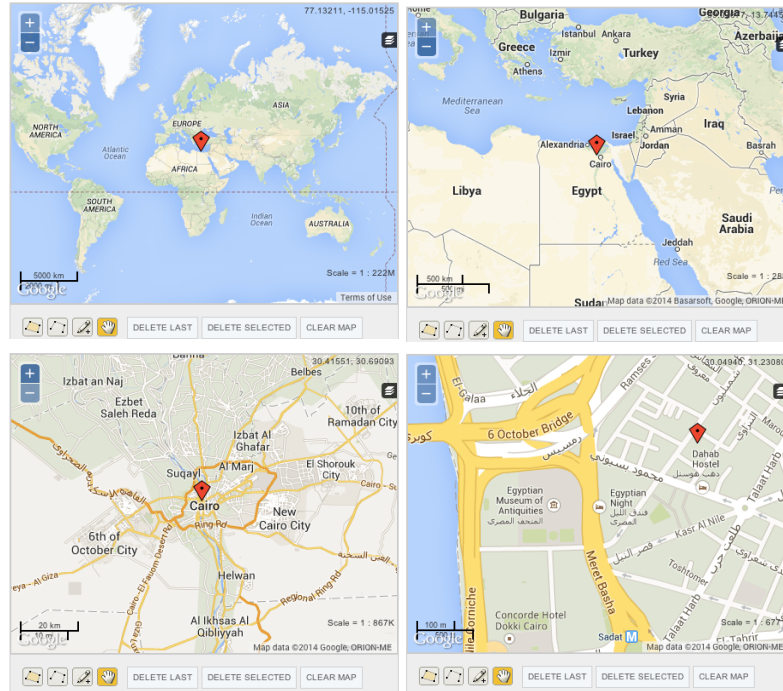


Fig. 5. Four different zoom positions on a single reporting map.
Source: Harassmap.org/en/submit-report. Author screenshots. April 12, 2014.

present a ‘view from above’ of incidents of sexual violence. The zooming function of Google Maps creates the aesthetic experience of sliding along a scale by constructing an uninterrupted flow between different spatial planes whereby sexual harassment is captured from the air to the ground target and then back again into the earth’s atmosphere at a scale of 1 pixel to 111 meters. At its maximal aerial vantage point (Fig. 4), the inflamed red dot representing instances of harassment and sexual violence in Egypt visually dwarfs the entire country, spreading into Turkey, Iraq, Saudi Arabia, Sudan, and Libya. The number of reports (1272 on April 12, 2014) mostly originating from Cairo grossly overshadows the single digit reports made in the United States (2 reports) and those made in Europe (3 reports).

Applying Kurgan’s engagement with Google Earth to the Google Maps interface, we can see how the political, economic and security stakes that

underwrite the creation of the map disappears (21). All that remains is the marker of sexual violence as a time stamp and a series of coordinates (21) that are made available for the public view.

Certainly it could be argued that Harassmap's efforts are focused primarily on Egypt's urban areas and not on the United States or Europe. The program's target areas notwithstanding, global surveillance is a spector residing within the combination of Google Maps satellite imagery and the international purview of the UN gender conventions and norms cited on the Harassmap website. The assemblage of interfaces that make up the harassment *map* generates a visual representation of the project's global jurisdiction, as well as a visual representation of its crowd-sourced data. While perhaps not intended, the result is one in which the problem of sexual harassment is presented as overwhelmingly centered in this particular part of the world.

Kurgan (2013) draws our attention to the 'radically decentering' effect of the seemingly 'uninterrupted flow' of the map as one moves smoothly from one scale to another. The combination of interfaces that make up the harassment map do not give preference to any particular scale, as there is no 'natural or logical starting or stopping point for the zoom'. Each scale is 'relativized by its proximity to and distance from the next' (20). The map is not bound to any particular location or scale, 'least of all the human scale', which is where Harassmap identifies the emergence of subject as victim or perpetrator (20). The decentering effect of the zoom toggle creates a visual representation of Harassmap's jurisdiction as global, a presentation that works concomitantly with the project's promotion of UN gender

norms. As such, Egyptian urban sociality and sexuality appears as a series of flattened and homogenous images (20) that can be evaluated and monitored at the minutest level.

Targeting Chains and the Plasticity of Victimage

What is perhaps most significant about the harassment map in this analysis is the way it shows how advances in mobile technology have deterritorialized the capacity for aerial surveillance from overhead images produced by military-grade satellites to quotidian ground level mobile communications devices for capturing video, photographs, and other information. The complex interfacing between practices, technologies, people, and policies creates a 'target-chain' that is used to direct Harassmap's management of Egypt's urban spaces. My use of the term 'target-chain' is inspired by Derek Gregory's (2011) theorizing of the 'kill-chain' in his discussion of more overt forms of violence in drone warfare and unmanned aerial vehicles (UAVs). In Gregory's description a 'kill-chain' is the dispersed apparatus of networked actors, affects, objects, discourses and practices that produce targets as these elements pass through the chain (196). This process of passing through creates particular kinds of subjects as bureaucratic practices and acute forms of violence are brought together in the creation of targets. What is unique about the late modern kill-chain, for Gregory, is that it must contend with mobile targets, which requires the rapid processing of information. This results in an experience of time-space compression that draws more dispersed elements within the apparatus closer to the visual field of the 'killing space' (196; citing Grant

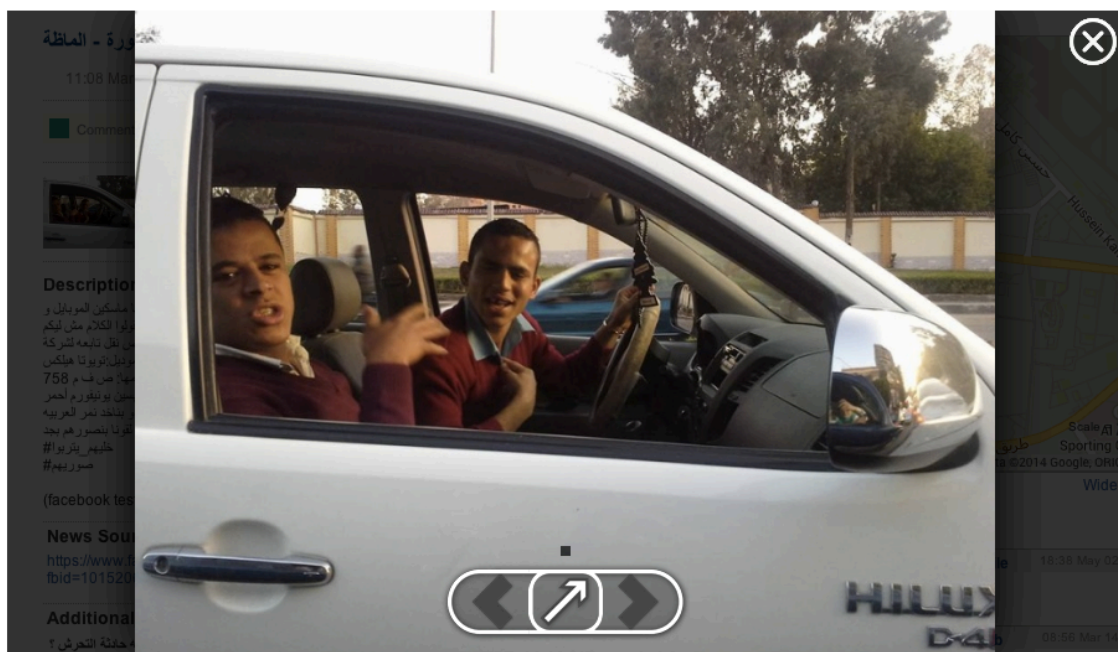
2008; Uecker, 2005).

A less overtly militaristic yet similar organization of actants and processes can be found in Harassmap's geospatial interventions. These interventions are also comprised of an assemblage of disparate and dispersed elements, including Egyptian women, NGOs, liberal international discourses on human rights, smartphones, GIS software, the Ushahidi platform, local shop keepers, international donors, images of young Arab men in moving cars, and security states that are drawn together in the creation of decisive objects of aerial targeting. Through its community mobilization campaigns, Harassmap engages everyday citizens in the practice of targeting (on the street when asked to 'speak out' against the harasser, in uploading reports, in taking photos of harassers with mobile devices, in identifying target areas for community intervention), creating a target-chain that, to borrow a phrase from Gregory, engages 'a series of links and nodes that extends into other realms of 'political, legal, social and scientific life' (2011).

In order to consider the incidental violence produced by this apparatus, we need to abandon the 'discursive flattening' (Graham and Hewitt, 2012) of geospatial targeting practices. Instead we should give closer consideration to the networked engagements between ground and air surveillance that make it possible for Harassmap to act on real objects and complex urban environments, where violence of such intervention have otherwise become increasingly abstract and obscured. This is, in part I think, a result of crowdmapping's so-called utility, as well the discourses of innovation and progress that filter into Harassmap's use imagery and navigation to be able to intervene on victims' behalf with increasing precision. It is

here that we find the answer to the ethnic-political problem of sexual harassment in Egypt - in discourses about Western technological superiority and a market-based ethics that sees life as enhanced through its subjection to free-market governance. Yet Harassmap's ability to hit its specific target is, as Zehfuss (2010) has argued about targeting precision more generally, not the same as not hitting anything else (551).

The targets visualized through the Harassmap interface, are also more than just a mark on the map representing an ogler, toucher, or rapist. In fact, it might be more accurate to say that Harassmap produces a series of interfacing targets. There



ABOUT HARASSMAP

STAY CONNECTED

CONTACT HARASSMAP

Figure 6. Image of harassers accompanying a report dated March 21, 2014.

Source: <http://harassmap.org/en/what-we-do/the-map/>. Author screen shot, May 7, 2014.

is the materiality of the targets themselves, which are actual people, objects, and environments that can be acted upon immediately, decisively, and with such speed

that the violence of these interventions often appear abstract. Within this material and holographical target space are racialized and sexualized women who themselves become targets for rescue operations, a practice that has a history in colonial practices of domination and contemporary discourses of Arab and Muslim women in need of saving (see Abu-Lughod, 2013). There is also Egypt's cultural acceptability of harassment as a target, which plays into culturalist explanations for sexual violence that rely on Orientalist tropes of malformed Arab masculinity, unchecked masculine aggression, and the 'predatory sexuality' of the so-called Arab street, which as Amar (2011b) argues in this analysis of gendered human security states, reinforces the idea that the Egyptian people are simply not ready for democracy (37). Consider conservative commentator Debbie Schlussel's statement after Lara Logan's assault: "Too bad Lara...This never happened to her or any other mainstream media reporter when Mubarak was allowed to treat his country of savages in the only way they can be controlled" (Lalami, 2011). While, as Lalami points out, Schlussel's statement is overtly racist, it still resonates with the more commonly accepted notion that Egypt needs an authoritarian government to keep its politics and population in order.

More importantly, the idea that the proliferation of sexual violence emerged as a result of the power vacuum left by Mubarak's ouster is factually inaccurate. Sexual violence committed by security forces, police, and hired 'thugs', or *baltagiya* was a frequently used element of Mubarak's repertoire of political intimidation tactics. One of the more notable examples is the event known as Black Wednesday, when in May 2005 security forces held back crowds so that plain-clothes policemen could

beat and sexually assaulted four women, including journalists, who called for a boycott of a constitutional amendment that would strengthen Mubarak's position in government and solidify the succession of his son, Gamal. (Ahram.org; Slackman, 2005). Mubarak's government also used sexual violence and harassment as a justification for mass arrests, of whom some were presumed political dissidents. This move was seen as a victory among many women's groups demanding more police intervention on the street. In another example, in November 2008 Egyptian security forces arrested 400 young men and boys between the ages of 15 and 17 for 'flirting offenses' according to Cairo police director Faruq Lashin (2011: 319).

A similar culture of sexual terror continues under al-Sisi's rule, despite his recent overtures to international demands for more government response to the issue. Egypt signed the U.N. Declaration of Commitment to End Sexual Violence in Conflict in 2013, and in 2014 made sexual harassment a criminal offense, with a punishment of up to five years in jail and fines ranging from 400 to 7000 pounds (Allam, 2014). It seems clear that the enforcement of the sexual harassment law seems highly selective at best, and at worst has been used as a justification for extending political brutality and the mass arrests of protestors. In October 2012, another 172 men were arrested during the first two days of the Eid al-Adha holiday (Egypt Independent). There have also been widespread reports of women being assaulted while in custody after they have been arrested to 'protect' them from harassment while engaging in demonstrations. Male dissidents are also regularly raped and tortured while detained by security forces under al-Sisi's military rule (Kingsley, 2014). If, according to government figures, more than 16,000 people

have been arrested for political dissent between July 2013 and April 2014 (Kingsley, 2014), it is daunting to consider the number of incidents of rape and assault like this that have gone unreported.

Harassmap has almost nothing to say about the role of the Egyptian government and Egyptian security forces in directly perpetuating a culture of sexual terror among its citizens. When explaining why they think sexual harassment has become so common in Egypt, they argue that there is no data that exists to explain this phenomenon, but that based on their experiences it seems reasonable to contribute it to a form of 'general aggression, power, and violence' within Egyptian society. Women are more likely to be attacked, in their explanation, because they occupy a lower position within society, and the government's passive attitude toward the problem of sexual harassment seems to be exacerbating the issue (Harassmap). However, the examples of state sanctioned violence illustrated above seem anything but passive.

Bringing Zehfuss' discussion of precision back in, these examples also ask us to consider what else might lie with the 'radius of the blast' of Harassmap's targeting campaign. Does the Harassmap team and its volunteers consider those who might not otherwise become targets of the state - for instance women who are 'protectively detained' (Amar, 2011, 319) from harassment during protests? Are these women simply considered 'collateral damage' in the overall appeal to more policing of sexual harassment? Does the program offer justifications for its own 'casualty levels' that also rise as sexual harassment becomes targeted more decisively by security and legal apparatuses? As Zehfuss (2010) points out,

'technological advances might lead to an increasing - or at least different - exposure of civilians, as did the possibility of aerial warfare in the first place' (553). In this instance, faith in precision may also encourage engaging targets in new ways and in more problematic environments.

Could the problem of sexual violence be considered in other ways? And more specific to this analysis, could the map itself be used and interpreted in a different way? Given the prevalence of the state's use of sexual violence against political dissidents, is it possible that 'hotspots' might also reflect areas where class-based mobilizations against Egypt's politico-military infrastructure are gaining traction, and thus where 'thugs' and other plain-clothes police might be deployed to do their dirty work? Where do LGBT communities fit, or alternative forms of public sexuality? And how might Harassmap be used to reduce state intervention in political publics rather than increase it? In a number of interviews and reports Rebecca Chiao has stated that they are not academics, from which I can only infer that she means the program is more interested in putting 'boots on the ground' (or eyes in the air) than speculating about the political, legal and juridical spaces that the map creates, as well as the consequences, intended or not, of its framing.

Conclusion

I have attempted to show how Harassmap's use of crowdsourced data for mapping sexual harassment helps us to think about the technological contributions made to securitization. There is a hidden violence to this feminist humanitarianism, one which translates Arab bodies, Arab streets, Arab neighborhoods, and Arab cities

into 'targets' for remote monitoring and intervention. The militarized systems and market rationalities from which these technologies have emerged cannot be entirely separated from the techniques of ordering and targeting that they make possible in the context in which I have described. While I readily acknowledge the variation and diversity in reports and in the emerging community responses within and across these security-scapes, the map's resonances with other forms of aerial targeting reveal broader patterns that depoliticize class-based politics around the issue of harassment, as well as promote increased state security presence without acknowledging the violence inherent therein. Aerial targeting via crowdmapping and online mapping applications attempts to subject whole populations to scrutiny and intervention, and treats them as targets that can, without careful scrutiny, be abstracted from political, cultural and geographical contexts, thereby reducing difference that might otherwise highlight the moral and political ambiguity of the map. The combination of UN gender norms and the turn to crowdmapping for the purpose of human security governance normalizes the ongoing subjugation of those who find themselves outside of these international norms and legal regulations, becoming racialized and sexualized targets for and who are targeted for discriminatory observation and intervention. Thus aerial observations and interventions operate on multiple discursive and affective registers where the categories and identities they create are far from objective (250). In the present context, these identities include but are not limited to *baltagiya* and civilian, 'woman' and middle-class consumer, and working-class youth and the 'Arab street.' The use of Harassmap as evidence of gendered sexual violence blurs how these

categories are constructed and conflated, flattening their nuance into a calculative sets of variables that can be mapped, ordered and filtered into zones of security and insecurity. These zones are then constructed as the differential borders between the powerful discursive tropes of developed and undeveloped, between civilized and backward, and so forth.

Campaigns like Harassmap reveal what Wall and Monahan (2011) call ‘an unstable fault line’ within societies in which the control of individual behavior is subordinated to the preemptive imperatives of risk and preemption (251). This targeted control is diffuse and can work in multiple directions, for instance in the hands of state security for the purpose of obstructing other forms of anti-government political mobilization.

Let us take Harassmap, which makes claims about the moral significance of its precision technology, at its word. How can such technology be used in a way to help stop gendered sexual violence against women without depoliticizing the strivings of working-class Arab youth, or obscuring other extant attempts to combat gendered sexual violence? I concede that the Ushahidi platform works very differently when it is used, for instance, to locate individuals and communities in need of provisions after a tsunami or an earthquake, than when it attempts to locate ‘hotspots’ of sexual violence. Also, the targeting logics that organize the Harassmap project may work differently in Egypt than they do in other locations. The geo-spatial technologies that Harassmap uses in the biopolitical management of Egyptian urban sociality remain open to experimentation, and offer the possibility of becoming a tool for bringing a heightened awareness to other types of violence

with certain categorical adjustments and visual reorientations.

What might the same technologies being used to police young Arab men do if they were redirected, for example, at Egypt's security forces and its implementation of state-sanctioned violence against women to thin their presence on the street? This potential resides in the realm of speculation for now. Still, we should be wary of the idea that better, more total surveillance will produce accurate depictions of the environment of gendered sexual violence. We should also be critical of paradigms of risk management that seek to sort whole populations into 'profiles and probabilities' (251) as part of a feminist internationalist organization of security governance in Egypt.

Chapter 3

The Digital Transgressions of Aliaa Elmahdy and Amina Sboui: Facebook Universalism and the Politics of Networked Nudity

In October 2011, 20-year-old Egyptian activist and American University of Cairo communications student Aliaa Elmahdy posted a nude picture of herself on her blog *A Rebel's Diary*. The post, titled 'Nude Art,' featured an otherwise black and white self-portrait of Elmahdy wearing only a pair of thigh high stockings, red heels and a red flower in her hair. The image was accompanied by the following text: "Put on trial the artists' models who posed nude for art schools until the early 70s, hide the art books and destroy the nude statues of antiquity, then undress and stand before a mirror and burn your bodies that you despise to forever rid yourselves of your sexual hangups before you direct your humiliation and chauvinism and dare to try to deny me my freedom of expression" (Elmahdy, 2011). A link to ElMahdy's

blog page was featured on Twitter, and within a week her image received 1.5 million hits, making her 'digital' transgression one of the most polemical topics to emerge during the contentious lead up to the first parliamentary election held after Mubarak was deposed (Kraidy, 2013; Mourad, 2014). Sixteen months later on March 1, 2013, 19-year-old Amina Sboui, who said she was encouraged by ElMahdy (Namazie, 2014), posted two topless pictures of herself on her Facebook page under the alias Amina Tyler. The first image featured Sboui reading a book with the words "My body belongs to me and is not the source of anyone's honor" written on her exposed chest in Arabic. The second image depicted Sboui giving the middle finger to the camera with the words "Fuck Your Morals" written across her bare chest and stomach. Although the images were removed from Facebook for violating the company's globally and uniformly applicable Community Standards policy, Sboui's images similarly went viral soon after posting to the social networking site, receiving worldwide attention in both international and local media. Sboui's subsequent arrest on May 30th of the same year sparked an international outcry from members of the Ukrainian-based topless activist group FEMEN, and women from around the world posted pictures of themselves topless online in solidarity and in protest of the state's criminalization of her actions (see freeamina.blogspot.com).



Fig. 7 Aliaa Magda Elmahdy (right). Source: arebelsdiary.blogspot.com

Fig. 8 Amina Sboui (left). Source: uriasposten.net

Both ElMahdy's and Sboui's images were captured by a kind of liberal euphoria at a time when the massive popular uprisings that removed several long-standing dictators began to take on complex configurations of local and global politics, and narratives about the 'success' of Western liberal democracy in the Arab world was struggling to maintain explanatory relevancy. At the height of these women's media popularity, the Muslim Brotherhood dominated the Egyptian polls in the first round of post-Mubarak parliamentary elections, and tensions were increasing over the influence of the Ennahda Party in Tunisian politics with the appointment of the party's secretary general Hamadi Jebeli to Prime Minister on December 14, 2011. To many, Elmahdy's and Sboui's quasi-public interventions on proprietary social media networks became a symbolic life jacket for the Euro-

American media over what was becoming increasingly visible to the rest of the world, that is, the limits of U.S. power in the Middle East and its marred prestige and dwindling resources for managing regional affairs and political outcomes.

To the extent that these mediated interventions have made ElMahdy and Sboui iconic images of the Arab uprisings for good or ill, they are significant in that they show how the range of human experience and performance of the feminine, postcolonial body is more and more defined and conditioned through techniques of networked development practices. This is not to put forward the reductionist assumption that culture and politics are driven by Western technological innovation. Rather, it is my contention that these women's bodies travel within specific dimensions and contexts in spite of the so-called flattening of the world. In my reading of Sboui's and Elmahdy's nude activism, I attend to the distributive agency between their physical bodies and the technological apparatuses that enable the production and distribution of their naked interventions across variably coded spaces, both physical and digital. Like the colonial postcard images of Algerian women in Malek Alloula's (1986) *The Colonial Harem*, the essence of ElMahdy's and Sboui's images is travel, and expedition is most certainly the mode. However, these women's nude images are not collectible items for storing in one's back pocket for an occasional illicit indulgence or for display in an album. As they appear, proliferate and are transformed within the conditions of networked globality, they function as public discourses that should be read alongside contemporary forms of violence embedded within the Western cultural and sexual exceptionalist discourses that frame their nude activism (Carby, 2004; cited in Puar, 2007).

In this chapter, I use these women's digital transgressions to present an alternative reading of the role of social media for political dissent, and how social media digitally produces forms of knowledge that are both gendered and racialized. As such, I attempt to circumvent opposing narratives of the use of social media during the Arab uprisings as either tools of liberation (Howard and Hussein, 2013) or apparatuses of control (Morozov, 2012). It is not that either position is wrong,



Fig. 9. Protestors in Egypt hold up signs in support of Facebook. Source: gettyimages.

but an overemphasis on either social media's liberatory potential, or conversely, its use for surveillance by a monolithic Middle East security state does not fully engage these platforms as a productive medium of particular forms of political and social subjectification.

Situated within modernist discourses about bridging the so-called digital divide, these women's mediated bodies point to how quotidian understandings and

experiences of global communications technologies becomes infused with a kind of mythical preconception or sensory experience of how bodies and technologies work together to produce certain outcomes (Taussig, 1993; Meyer and Pels, 2003; Whitehead & Finnström, 2013). One of the ways that I will try to present an alternative reading to these women's interventions contextualized within the reproduction of Western social, political and economic mores is by engaging the agentic capacity of the panoply of devices and platforms at work in the performative travel of Sboui's and Elmahdy's bodies on and offline. In other words, most users are unaware of how social media actually works in terms of the coding, machinery, and infrastructure required to post a single link to the network. As particular events gain global traction with disruptive effects, the power of social media is reified, and posts, comments, and tweets become tiny incantations as the Western world is awestruck at the immediacy and scale with which information circulates.

I am also interested in challenging narratives about how social media as a Western technological innovation mechanically reproduces liberal progressive modernity through shared sensory experiences via "the technological substance of civilized identity formation" (pp. 207-208). Narratives about the Twitter and Facebook revolutions exaggerate the accomplishments of technology and mechanical reproduction at a time when the flurry of excitement that follows this or that new app, iPhone update, or new and improved iPad, becomes routine, and the initial awe passes into the realm of everyday experience. Vis-a-vis the 'backward' Arab mired in custom, tradition, religious conservatism, dictatorial politics, gender oppression and so forth, narratives of technological supremacy read into these so-

called 'social media' revolutions position the Westerner (read citizen of the world) as master of these technological wonders, while simultaneously celebrating and clientalizing the subjects of a postcolonial body politic whose agency is "eviscerated as 'magic'" (p. 208). This relay between the 'techno-modern' and the 'magico-primitive' (Whitehead & Finnström, 2013, p. 2) informs the dismissal of, for instance, the tactics of Ukraine-based topless activist group FEMEN as irrelevant to real (meaning secular-liberal) feminism, while Elmahdy's nudity becomes a "titillating act of brave rebellion" in the Muslim world (Crocker, 2013).

To the extent that social media platforms like Facebook, Twitter, Blogger, etc. are presented as a new global public spheres through which 'trailblazing' feminists like Elmahdy and Sboui can further a Western secular and liberal feminist agenda in the Arab world through the power of social media, this is, in effect, the expression of the idea of the power of technology as mimesis in the act of networked participation. In *Mimesis and Alterity*, Taussig (1993) describes mimesis as the ability to imitate, copy or 'yield into', and "become other in such a way that the copy draws power from and influences the original (xiii; cited in Coombe 1996: 205). As Coombe (1996) argues, "The representation gains or shares in the power of the represented and the image affects what it is an image of" (205). In other words, whereas imitation is one side of mimesis, contagion and sensuousness is the other (205). Taussig uses the example of the fingerprint and His Master's Voice Talking Dog (RCA logo) to show how these two features of mimesis are brought together:

Through contact (contagion) the finger makes the print (a copy). But the print is not only a copy. It is testimony to the fact that contact was made – and it is the combination of both facts that is essential to the use of fingerprinting to the police in detection and by the State in certifying identities. The Talking Dog also interfuses contagion with sympathy, the sensuous with imitation, because it is on account of its sensorium, allegedly sensitive to an uncanny degree, that it can faithfully register – i.e. receive the print – and distinguish faithful from unfaithful copies... The dog becomes the civilized man's servant in the detection, and hence selling, of [the] good copy (1993: 220; cited in Coombe, 1996, 205).

Here, one 'gets hold of something by way of its likeness', through copying and imitating, through a sensuous or embodied connection between the perceiver of the act to be mimicked, and the perceived upon making contact with one another (21). While Taussig's discussion of mimesis is historically and geographically generalizing, his ideas are useful for considering how narratives about the social media revolution in the Arab world reflect a kind of contemporary 'first contact' narrative (see Gewertz and Errington, 1993), one that takes place within a particular environment of global consumption. The use of social media indexes fidelity between the imagined 'West' and the 'Arab' world in two ways. First, it gives the profile user a mark of authenticity. If one has a Facebook or Twitter account, then it references back to an originary presumptions of these platforms that link political change, resistance and democratic participation to technological progress, information access. Each profile created, each tweet posted, carries this originary authenticity. They also index a contemporary example of a contact moment where somehow the political and economic milieu from which these platforms emerged act

like a fingerprint on their users across the world, regardless of the historical, political and economic contexts in which they are used. Similar to the way that trademarks function in a mimetic context, “the mark”, which is in this reading the networked profile, “distinguishes the copy by connecting it to an originator and connecting the originator with a moment of consumption” (Coombes, 1996).

If we are to challenge these invocations of the mimetic power of social media, we need to take seriously the entanglement of agencies that relate the range of human experience and performance of the feminine postcolonial body to forces of technologically-led intervention. As such, I do not propose a writing ‘for’ these women, nor do I explore their nude activism as a political strategy that may or may not be demonstrative of emerging shifts or trends in Arab women’s intervention in political spaces. Rather, I propose an engagement with Sboui’s and Elmahdy’s nude activism from *within* the globalizing networks that their bodies travel, in order to show how their transgressions have bearing on theories about our current networked condition.

I consider ElMahdy’s and Sboui’s nude activism at the site of the interface as a methodological strategy for navigating the messy intersections of gender, networks, social media interfaces, bodies, legal doctrines and normative frameworks, algorithmic languages and globs of code that shape the techno-politics of their interventions, as well as the multiple modalities of embodied and technological agency implicated in their particular politics of exposure. I read the interface here not simply as a thing, for instance the face of a smartphone or a computer screen, but rather as a series of relations that constitute a threshold

condition through which, as Hookway (2014) has argued, “the reservoir of human agency and experience is situated with respect to all that stands outside of it, whether technological, material, social, economic or political” (1). To the extent that the condition of interfacing with these communicative technologies becomes more “ubiquitous, indeterminate and pervasive” it is so with respect to “the proliferation of engagement with ever more complex devices and networks” (1-2) that in order to properly engage requires a model of agency that is distributed between among and across an assemblage of both human and non-human actors.

In this chapter, I use the concept of the interface to look more closely at these ubiquitous devices and networks so as to demystify the mimetic power of social media to replicate liberal subjects in the Arab world by showing how these platforms do not simply mirror or reflect particular social and cultural values but are also productive of new forms of subjectification. This requires that we rethink binaristic models of human-computer interfacing that present two separate realms – the body and technology – as influencing one another in determinate spaces, rather than a conditioning interaction of mutual intelligibility (Bogost, 2006; Suchman, 2007; Barad, 2012; Galloway, 2012). For example, logging into Facebook, Blogger, Twitter, or Instagram opens users up to algorithmic interventions that, although indeterminate and elusive, still, as Hookway argues about interfaces in general, “channel the activities under its influence toward a resolution within a common protocol, while at the same time opening up new vistas and capabilities to a new-augmented human sensorium” (2014: 1-2). As such ElMahdy’s and Sboui’s naked activism can be seen as events of “material entanglement of political and

scientific practices that matter to the production of subjects and objects” (Barad, 2007: 231-232). But what are these common protocols, and why do they matter for those of us who are interested in these women’s provocative interventions and to a broader community of travelers within the networks that these images circulate?

I use these concepts to consider how algorithmic and normative protocols imbedded in social media platforms inspire certain forms of gendered political communication while prohibiting others. Rather than rely on culturalist explanations for why they posed naked online, I explore the distributive agency between their physical bodies and the technological apparatuses that enable their bodies to be mediated for local and global audiences. I examine the images’ patterns of travel across variably coded space, both physical and digital. I then trace the flow of these political images of human bodies along with millions of pornographic and violent pictures, from the visible interface to the hidden network of low-wage content moderators tasked with the demoralizing and debilitating job of managing the flow of this content. Ultimately, my reading of these women’s transgressions seeks to undo the depoliticization of Facebook’s behind-the-scenes filtering by showing how these bodies travel within the same channels of labor exploitation associated with the electronics industry and networks of global connectivity.

Bodies, Algorithms, Machines

The predominant interpretive framework for those viewing and circulating Elmahdy’s and Sboui’s images in the U.S. and European media has located their actions within narratives about the so-called ‘Twitter and Facebook Revolutions’

happening across the region in pursuit of a liberal cosmopolitan feminist interest. In these accounts social media are presented as 'liberation technologies' credited with providing Arab women the necessary capabilities to empower themselves and alter their political circumstances through participation in networked communities (Mejias, 2013: 146; Grove, 2014). Social change here is ascribed to 'wired' women activists and the outcome of flows of information is imagined within the context of a universally applicable Western liberatory telos (Massad, 2007: 165) where markets are seen as the engines of democracy and corporations like Facebook – not corrupt governments – are thought to be best able to provide the communicative infrastructure for democratic contestation and political organization. Journalist Mona Eltahawy, who has frequently written about the 'war on women' in the Middle East, as well as about Facebook, YouTube and Twitter as "the new protest tools of the Arab world," compared ElMahdy posting images of her nude body on Blogger to Mohammed Bouazizi's self-immolation, provocatively referring to her as "a Molotov cocktail thrown at the Mubaraks in our heads" (2011). Others have referred to ElMahdy's nude activism as 'the ultimate act of brave rebellion' (Crocker, 2013), and Sboui, by way of her digital interventions, has been credited with 'jumpstarting a whole new level of protest in the Middle East' (Rosenbaum, 2013). This last sentiment took on particular salience when three European FEMEN activists traveled to Tunisia and disrobed in front of the Palace of Justice on May 29, 2013 to protest Sboui's imprisonment (Bouazza & Schemm, 2013). The protest was heralded as the first of its kind in the Arab world, and images of the three young,



Figs. 10 and 11, FEMEN members protest Sboui's arrest in Tunisia, May 29, 2013.
Source: European Press Agency

white, topless women being forcibly removed from the parameter of the building by an irritated 'mob' of Arab men quickly spread across multiple online news sources and social networking sites.

Not all accounts of ElMahdy's and Sboui's actions were unequivocally positive. As Sarah Mourad (2014) notes, ElMahdy's photo received mixed responses in the Egyptian press with some commentators arguing that her image epitomized the dystopia of user-generated content and confirmed attitudes about social media's reinforcement of "depraved behavior," and that her Facebook pages "incite rebellion against values, principles habits and traditions" (p. 65). Other detractors have argued that ElMahdy's and Sboui's actions have not sparked a much needed discussion on women's rights in the Arab world. Instead they argue that the images relegate Muslim women to the status of victim, robbing them of agency and forcing them into the position of having to defend their religion rather than engaging the structural issues of inequality that these protestors claim to be addressing through a form of naked protest. Writing for *The Atlantic*, Uzma Kolsy (2013) argued that these topless activists should "put their shirts back on and roll up their sleeves" in

support of Muslim charities and social service organizations “all over the world striving to remedy these social ills.”

Their criticism notwithstanding, even those accounts that did not wholeheartedly embrace ElMahdy and Sboui’s tactics still tended toward bracketing their bodies within celebratory narratives about the power of social media to provide women in the region with previously unavailable opportunities to participate in political and civic action, and to shape public policy. In a *New Yorker* article titled *How to Provoke National Unrest with a Facebook Photo*, Greenhouse (2013) contextualizes Sboui’s nude activism within ‘worrying’ restrictive political developments directed at women after President Zine el-Abdine Ben Ali’s ouster. Acknowledging the emerging controversy over whether or not nude activism best addresses the problem of objectifying women’s bodies, Greenhouse affirms the power of new media and its impact on politics in the region, stating that “some question the effect that online activism has in the real world, but Tyler’s image has no doubt provoked real consequence... in the digital age, no editor or mediator gets to decide how to frame a public battle. A woman has a room, a body, a camera, and a Facebook profile of one’s own.”

A growing selection of work has attempted to locate ElMahdy’s and Sboui’s nude bodies within the broader context of contestations over revolutionary subjecthood in Tunisia and Egypt as these countries continue to undergo intense political transformations. They also, to varying degrees, attempt to present a more nuanced interpretation of ElMahdy’s and Sboui’s use of the naked body as a site of political transgression and protest beyond the problematic collusion between

discourses on the democratizing potential of social media for the Arab world and the 'War on Terror' ethic of 'saving' the homologous Arab woman from depoliticized



Fig. 12. Egyptian security forces attack a female protestor during the 25 January Revolution in Egypt. The woman, now known as the 'Girl in the Blue Bra' has become an iconic image of the Revolution. Source: NPR.org

and culturalized environments of religious and patriarchal oppression. Sherine Hafez (2014), for instance, considers the discursive construction of feminine corporeality as a theoretical framework for examining tensions over women's physical interventions in public space during and after Egypt's 25 January Revolution. Hafez examines ElMahdy's nude activism alongside Samira Ibrahim and the Egyptian military's systematic performance of forced 'virginity tests' on female protestors, as well as the brutal attack against the woman known as the 'girl in the blue bra' in order to emphasize how women's revolutionary bodies "are employed

as visible markers of sociopolitical values and norms just as they are simultaneously deployed to counter these normative symbols by the women themselves” (176). In Hafez’s account, ElMahdy’s nude activism presents a potentially novel form of corporeal practice that transgresses limits placed on the female body by challenging the notion of the feminine corporeal form as “the locus of piety, chastity and honor” (183) while at the same time appropriating systems of discipline and regulation by reducing the complexity of women’s struggles and the issue of gender inequality to a question of dress/undress. This criticism resonates with other criticisms on the overemphasis on the veil in Western articulations of freedom and emancipation with regard to Muslim women, which marks out and reduces Arab women to their sexuality. Comparable criticisms have been made about popular works by Muslim women ‘native informants’ (Spivak 1999: 360) including Carmen Bin Laden’s *Inside the Kingdom* (2007), Azar Nafisi’s *Reading Lolita in Tehran* (2008), and Ayaan Hirsi Ali’s *Infidel* (2008). Works like these present a culturalist reading of women’s struggles, where gender inequality, poverty, access to healthcare, education and political representation are presented as problems of a ‘culture’ that is either overly or indirectly tied to Islam, rather than the result of complex political, economic and social phenomenon that have both domestic and international components. Similar culturalist interpretations of ElMahdy’s and Sboui’s actions are regularly presented as articulating the Qu’ran as bad, Islam as harmful to women, and ‘unveiling’ as a reinforcement of the notion of sexual pleasure as freedom and secular redemption (Mahmood, 2008; Norton, 2013).

Marwan Kraidy (2013) has discussed ElMahdy's nude form as a vignette through which to consider the importance of the body for understanding recent developments in the Arab world. Highlighting the question of social media in his analysis, he argues against the "self-virtuous, technology-enamored ethnocentrism" (286) that has held up ElMahdy's naked activism as evidence of the power of Twitter, Facebook and other American digital interventions to 'rescue' Arab women from patriarchal culture and Islamic conservatism. Kraidy is rightly critical of the emphasis on 'social media' in the Arab world as being something exclusively associated with digital technology. This limited understanding of what social media is reduces communication to computer-mediated interactions, and ignores the power of other forms of creative communication including "puppetry, poetry, singing and graffiti that," as he argues, "animated Arab uprisings in Egypt and Syria a century ago, and continue to thrive in recent Arab rebellions and activism worldwide" (286). Kraidy's emphasis on the body is a corrective to the technological determinism and historical presentism implicit in the overemphasis on the role of social media with regard to political performances like ElMahdy's, which he says "ascribes agency to machines rather than humans" (286).

This particular concern that an overemphasis on digital media detaches the viewer from the human subject, who is the original reference in the production of mediated content, is shared amongst many scholars of culture, media and politics. The problem with this kind of analysis, in their estimation, is that it "deterritorializes the human," to borrow a phrase from Hansen (2006), thereby producing a feeling of anxiety over the loss of embodied experiences of physical

location, physical bodies and the very real consequences for those on the other side of the screen (xiii). As a corrective, Kraidly argues for a reconsideration of the body as the “oldest medium” and “the heuristic eye of the needle through which all empirical materials and theoretical considerations are filtered, considered and interpreted” (285).

Still, either by way of omission or as a result of an understandable skepticism, questions of ‘machinic agency’ (Guattari, 1984: 155) here is largely unexplored beyond a criticism of exaggerated narratives about the power of social media and the impact of Western technology on the ‘backward’ Arab mired in restrictive custom, tradition, and fundamentalist religiosity. These accounts also leave us with an outmoded binaristic model of virtual/real and body/machine that eschews the fluid crossings between the biological and the digital realms which also have a part in shaping the gender-configuring corporate, entertainment and activist environments that these more rigorous accounts of ElMahdy’s and Sboui’s activism are trying to elaborate (Balsamo, 1995; Hayles, 1999; Braidotti, 2013). To the extent that the range of human experience and performance, including those related to gender, race, ethnicity, religion, politics and economy, are more and more defined and conditioned through the forces of technological development, then, as Hookway (2014) has argued, what we think of as ‘humanness’ is already implicated in its relationship to technology (p. 1).

I keep returning to Greenhouse’s (2013) phrase “...a body, a camera, and a Facebook profile...” not because of any ideological affinity with the piece – in fact, quite the opposite - but because she, perhaps unintendedly, points to the

assemblage of forces and a surface of inscriptions of social codes, technological devices, biological material, and algorithmic organization that constitutes ElMahdy's and Sboui's nude activism. As such their actions provoke several ways of conceiving of new kinds of gendered politics and global chains of communication and exploitation within the experimental spaces of digital activism. In other words, digital forays into the use of nudity by these women as a form of protest in and about contemporary networked politics do not happen in a disembodied virtual reality, but rather are the effects of particular political experiments. For example, consider the multiple human-computer interfacing sites that make up Elmahdy's nude photograph (Fig. 7). These interfacing sites are also assemblages, which Bennett (2010), drawing from Deleuze & Guattari defines as "ad hoc groupings of diverse elements...that function despite the persistent presence of energies that confound them from within" (23-24). Elmahdy's self-portrait required her to interface with a digital camera, to manipulate the settings, to position it either on a tripod or perhaps a set of books on a desk. At another level of interfacing between the body and the camera, Elmahdy's corporeal form is converted into electrical charges transported through a maze of electronics, which are then interpreted by the camera's firmware. The firmware retranslates this information into codes of color and qualities of light that make up the nude image, which interfaces with the human eye as well as other electronic devices including the panoply of smartphones, laptops, tablets as well as other website interfaces with which we must engage in order to view, comment on, and share her images. These interfaces exist along varying levels and surfaces of interaction and forms of relation that point to the

distributive agency implicated in the taking and uploading of a single photograph, which exists in its present form as both the effect and 'cause' of particular material states and specific historical and social relations (Galloway, p. vii). Thus widening the sphere of focus to include the networks, programmatic languages, circuitry, and algorithms that are also part of the story of Sboui's and ElMahdy's nude activism also broadens the spaces of politics where these bodies travel, what they pause at, pass over, or leave traces of. In my reading, their use of the nude body as a form of protest has implications for how social media and its normative protocols shape what forms of gendered political communication are possible and what are not, which have global implications as these protocols are generalizable across national borders. They also have implications for thinking about the material labor arrangements emerging as a result of these protocols, and how the outsourcing of content management is an integral aspect of the functioning of these protocols. Finally, to say that technology fundamentally structures experience is not a concession to a different kind of technological determinism in which machines determine our actions. As Carlson and Corliss (2007) have pointed out, participants in the network can often exploit and subvert the narrative elements, rules and structural requirements that bind them.

Atomism, Facebook Universalism and the Particularities of Participation

To the extent that social networks are considered extensions of, or tools for promoting a kind of global cosmopolitan citizenry, these algorithmic languages also have a part in shaping the discourses surrounding what this citizenry should look or

be like, who is on the outside, and who is on the inside. We can apply Galloway and Thacker's (2007) discussion of 'informatic play' and gaming to participation on social networking sites in that these platforms "should be interrogated not as liberation from the rigid constraints of systems of exchange and production but as the very pillars that prop those systems up" (115). In other words, the more social media appears to liberate the user by ushering her into a global community, the more the user "is enfolded into codified and routinized models of behavior" that make up the spectrum of communication on Facebook, Twitter and so forth.

The most important effect of these technological templates for social communication is that everything that is not a node in the network becomes invisible and illegible. This is what Mejias (2013) refers to as nodocentrism (11). To give an example, algorithmically generated recommendation lists, for instance #FreeAmina, #ToplessJihad, or #nudephotorevolutionary hashtags, show how "these lists might aggregate the opinions of large communities of users" (11). However in doing so, they "operationalize decisions about what is included in and excluded" in public conversations about their nude activism (11). As we become increasingly dependent upon these platforms for mapping how political ideas and activities travel in and through the network, nodocentrism becomes operative in, for instance, rankings which in turn have implications for visibility (ie. 'top tweets'). Social networks require algorithms to transform social activities into something that can be read and performed on the network, for instance 'liking' something in 'real life' and liking it on Facebook, 'friending' someone, sharing a picture on blogger, or having a debate about this or that issue in a comments section. As Mejias notes,

these forms of digital organization and archiving necessarily point to a particular politics of knowledge. Algorithmic languages shape the parameters of online communication through coding languages that direct how communication happens on social networking platforms. Thus these languages shape the substance of communication: “algorithms serve as allegories of social acts that give new meaning and content to those social activities in the process” (47).

The primary unit in the Facebook paradigm is the individual profile or account. As such the complexities of community and social life, and how difference is negotiated are flattened into the self-contained categories of ‘like’, ‘friend’, ‘share’, ‘report’, and so forth. As Hui and Halpin have argued, “this networked paradigm for social interaction curtails the creativity and spontaneity of collective intelligence, which is deformed by intensive marketing and consumerism aimed at individuals” (2). Facebook’s privacy policies are complex and non-transparent in terms of how data is collected and used, and the platform also tends to marginalize alternative political views and tactics, in this instance the use of nudity as protest, for the reason that it tends to alienate or incite users, and is to put plainly, bad for business (Fuchs, 2013: 213). Here Facebook’s user agreements elicit certain proscriptive controls which are not particularly novel in that public nudity is also seen as a marginal and controversial political tactic offline as well. What is important here is how the translation of this particular social norm is translated into data structures and symbolic logics within the programmatic language of the software.

This notion of networked subjectivity as atomistic and particularistic and the disciplinary effects of its algorithmic transcoding have larger implications for the

global community of ‘users’ (which is itself a subject category created through the practices of social media participation) as these platforms are increasingly adopted as sites for transnational and transcultural communicative politics. With the number of Facebook accounts in the United States and Europe beginning to plateau, the company has been looking into branching into other global markets. In a 10-page white paper published on Facebook, founder Mark Zuckerberg presented his mission and vision for connecting the poorest people of the world to low-cost, low-data versions of basic Internet services through a combination of a projects: 1) Internet.org, a consortium allying Facebook Nokia, Samsung, and network infrastructure manufacturers; and 2) a product called ‘Facebook for Every Phone’ which provides Facebook service on feature phones and is currently being used by approximately 100 million users. In his Facebook manifesto, Zuckerberg argues that only a ‘connected world’ can necessarily address the issue of growing global economic disparity: “If you know something then you can share that and then the world gets richer. But until that happens there’s a big disparity in wealth, the richest 500 million have way more money than the next 6 billion combined. You solve that by getting everyone online, and into the knowledge economy by building out the global Internet” (Levy, 2013).

Facebook’s plan to bring online the world’s ‘next five billion natives’ (Deibert, 2013) links global economic disparity to a civilizational and racialized explanation of being ‘closed off’ from the rest of the world, and bridging the so-called digital divide becomes normalized as an end for those who seek to partake in the benefits of Western technological innovation. Here Facebook is presented as an online

platform for the “frictionless mediation of networks” (Hui and Halpan, 2013, p. 3), which allows isolated parts of the world to connect to other members of this utopic, networked global society. The ideological force of this popular vision of Facebook is linked to the image of the social network as a sterile space into which all may enter as equals. Here we see how the discourse of Facebook universalism is linked to developmentalist models of progress. In both cases, only nodes in the network can only acquire currency, both literally and figuratively.

Galloway and Thacker’s (2007) discussion of the new ‘sovereignty of networks’ presents a useful corrective to such interpretations of Sboui’s and Elmahdy’s nude transgressions. Following Agamben, Galloway and Thacker assert that sovereignty is not based on the right to impose law but rather to suspend it in the state of emergency (34). Facebook represents a kind of sovereignty ‘through the back door’ whereby social media platforms reassert a form of control through ‘the fetish of information’ (38). There are two things that we can take from this idea of Facebook sovereignty ‘through the backdoor’. The first has to do with the tensions between algorithmically managed content policies for social networking platforms and the legal conventions and social norms that these policies often push up against in the process of social and political translation in other countries. Here norms and legalities in one location can create a generative friction as they interact with different social and technical codes that shape communication on the network. These frictions continue to emerge between the promotion and liberalization of communications services and communications markets in several countries in the Middle East and North Africa, the lack of Internet-specific legislation (although some

countries have started to develop a more comprehensive legal code for Internet use; see Diebert, Palfrey, Rohozinski and Zittrain 2008); the growth of broadband Internet access across the region, and the way in which European and American standards and norms for international communication are reflected in the normative and algorithmic protocols of proprietary social networks. They are reflected in the interfacing between these women's bodies, which at the time were physically located in Egypt and Tunisia, and the social networks they used, which reflect primarily American social conventions inflected with elements of international law. For instance, while the consequences for posting a breastfeeding photo or a photo of oneself at a topless protest in the United States is negligible, both ElMahdy and Sboui were forced to leave Egypt and Tunisia as a result of their actions; at the time of writing Elmahdy is living in exile in Sweden, while Sboui was imprisoned for four months for a series of legal infractions and is now living in Paris.

Interfacing the Organizations of Power: Facebook Bras and Digital Sewage

Social network services have played an important role in the global production and dissemination of Sboui's and Elmahdy's images, providing them with a platform for archiving and sharing their interventions through photographs and status updates. Facebook is the most popular social networking service in the world (Fuchs, 2013, p. 213). It is no surprise then that despite the site's censorship of their naked bodies, both Sboui and Elmahdy continue to maintain active profiles in order to keep their 'Friends' and 'Followers' up to date on their activism, thoughts

and reflections on a variety of subjects, and information about their relationships with family, friends and lovers. At the time of writing in July 2014, Elmahdy currently has 95,000 followers on her personal Facebook page, and Amina Sboui, who also refers to herself as 'el nudistah,' has more than 6,400 followers and 3,600 Facebook Friends. Both women's accounts are public. Both have also linked their Ask.fm accounts, a social networking website that allows users to ask other users questions with the option of anonymity, to their Facebook pages so that these exchanges appear in their Facebook feeds as individual posts.

Facebook provides Elmahdy and Sboui a platform for their nude activism, even as it has policies against showing breasts, nipples and full nudity. Elmahdy and Sboui have also at various times discussed their dissatisfaction with the removal of their original images from Facebook, as these images violated the company's Community Standards policy (see Fahmy, 2011). It is in fact quite difficult to find unaltered images of Sboui's and Elmahdy's unclothed bodies online, as their publication generally requires that they be truncated above the breast or that their nipples be pixelated, blacked out or deformed in some way. Facebook's Community Standards are, according to the website, designed and enforced to 'balance the needs and interests of a global population' (www.facebook.com/communitystandards/). Details of the company's policy on this issue are covered under the section 'Nudity and Pornography,' where a brief and rather ambiguous mention of limitations on the display of nudity on the site follows another similarly brief mention of the company's strict policy against pornographic content and explicit sexual content involving minors. Blogger, one of

the few social networking sites where users can view Elmahdy's unaltered images, describes itself as 'a free service for communication, self-expression and freedom of speech' (www.blogger.com/content.g). Here 'free speech' is algorithmically reflected in the blog's source code, which places Elmahdy's images behind a mature content interstitial requiring her viewers to acknowledge that the site they are about to enter may contain content considered 'only suitable for adults.'

In Jean Baudrillard's *The Ecstasy of Communication*, he argues "we no longer partake in the drama of alienation, but are in the ecstasy of communication. And this ecstasy is obscene...because in the raw and inexorable light of information" everything is "immediately transparent, visible, exposed" (cited in Chun, 2004: 27). However, as Chun notes, information and transparency are not the same thing. Information is a form of computation in that computers must generate information by sending and receiving light pulses in order to create what they are programmed to refer to. Hence computers are not 'transparency machines' that simply reflect some original referent, whether text or an image, but must actively create information so that it is readable to human beings (27). Software, like ideology, thus perpetuates certain notions of seeing as knowing (27). In other words, software through its programmatic languages – which themselves are the product of gendered systems of command and control – discipline programmers and users in such a way that the invisible systems of transcoding and algorithmic protocols create a system of visibility that obscures the vastly complex processes and languages that produce what we see as simply information (27-28). For Chun, software is a 'functional analog' to ideology in that it reflects almost every definition

of the word. For instance, operating systems offer an imaginary relationship to hardware by presenting a picture of a 'recycling bin' or a 'trash can' rather than transistors. Software produces 'users,' however there are no users save for those produced by OS procedures and actions (43). Also the choices that operating systems offer limit what are an imaginable or visible set of actions, and what are not : "software and ideology fit each other perfectly because both try to map the material effects of the immaterial and to posit the immaterial through visible cues" (43). Yet as Galloway (2006) notes, "software is not merely a vehicle for ideology; instead the ideological contradictions of technical transcoding and fetishistic abstracting are enacted and 'resolved' within the very form of software itself" (p. 319). In other words, there are tensions between the operations of code and the attempt to abstract certain social frameworks to make the visible or operable on a computer. Chun similarly argues that software has both the capacity to reveal and conceal, and that this dual action gives it the ability to break from the analogy.

ElMahdy's body points to the allegorical relationship between software and ideology in the managing of mature content on Blogger and Facebook. She attempted to use her nude body as a statement of protest and/or artistic expression (the intention behind the action isn't necessary to the argument) on social media, but that statement was promptly erased or altered. In this sense, it becomes the terrain for constituting community norms on a global scale to the extent that Facebook and Blogger are used as transnational forms of global communication, but without global participation because the companies' operating systems determine what appropriate content on social media should be. Consequently, her body

becomes a technical coding problem in that it must either be removed or labeled 'mature' along with pornographic content, rather than a site for public contestation over what forms of protest are appropriate for a revolution and how those forms of protest can be communicated. Following this, as platforms for political communication, companies like Facebook and Blogger allow for certain forms of gendered communication while excluding others.

It is beyond the scope of this chapter to explain in detail the debates within liberal feminism over the conflation of sexuality and freedom, the heteronormative conflation of queerness and obscenity, the conflation of breastfeeding and nudity, and a number of other discourses that inform why breasts might be considered 'mature content' online, regardless of how or in what context they are shown. What is important to note is that this ethos is transposed as *ideology through software* to 'users' everywhere, even though women have developed narratives and practices about bodily display and its meanings and purposes over generations. For women who have a very different conceptualization of how bodies can be used expressively, politically or otherwise, these negotiations become a matter of algorithmic protocol based on a series of abstractions about the proper place of the gendered body for public consumption. In other words, Sboui, Elmahdy and those who interact with them or their images on social media are appropriated into a form of participation where community standards are determined by the disciplinary parameters of the platform.

There are, however, always openings. At the site of the interface, the aggregation of ideas and knowledge is combined in a particular location, where users test the expression of ideas in relays with Facebook's normative and programmatic parameters. This interchange facilitates particular forms of knowledge and expression at this site of interfacing produced by a range of "partially transformable rules, resources, tools and behaviors," as well as its status as a platform that encourages and facilitates particular kinds of contributions (Fuller & Goffey, 2012, p. 92). To provide an example, Sboui continues to post images of her topless protests on Facebook despite its anti-nudity policy. In a public profile picture posted to the site on May 1, 2014, she is shown is being arrested by two French police officers. One is behind her holding her wrist and the other in front appears to be grabbing at her other hand to prevent her from making a peace sign. It is clear that Amina is topless in the image, but because her breasts are covered in paint, the image somehow falls within Facebook's content guidelines, evidenced by the fact that it has not been removed from the site. Facebook has come up against criticism for its anti-breast policies, in particular for banning images of breastfeeding mothers while alternatively being slow to address content promoting gender-based hate speech and violence against women (Hern, 2013). The company has since moderated its policy on breastfeeding in part due to the increasing popularity of the #freethenipple campaign, which Sboui has been an



Fig. 13. Image from ElMahdy 's public Facebook profile album.

active supporter of, by allowing moderators more leeway in 'using common sense' to determine whether or not a breastfeeding photo is considered a content violation (Matyszczyk, 2014). This demonstrates how, as Joost Raessens (2006) has also argued 'users are not only caught in the system but also appropriate and domesticate [...] technologies' (p. 54). In another example of testing and play at the interface between appropriate and inappropriate content, Elmahdy posted a picture to her public profile taken during an interview with French *Elle* conducted in

December 2013. The photograph features Elmahdy in a similar state of undress to her iconic image, except in this particular image she wearing a black skirt and



Fig. 14. Image of commenter Julian Halbeisen, December 30, 2013. Source: Facebook.

standing in two inches of snow. Behind her is the dreary background of a wintry town, presumably where she is currently in exile in Sweden (Trétiack, 2013).

Elmahdy reposted an altered version of the article image to her account, this one with the blue Facebook logo banner over her breasts (she posted a second altered version of the photo fourteen days later with a party hat on her head for New Years Eve). As one commenter noted, 'you have to wear your Facebook bra.' Another user posted a picture of himself shirtless in the comments section of the photo wearing his own 'Facebook bra' over his chest with the OOs removed to reveal his nipples. Whether or not the photo was posted as a sympathetic jibe against Facebook's

gendered nudity policy, or as a taunting antic (Elmahdy retains her detractors and her continued interventions remain a draw for different kinds of violence), it regardless points to several layers of gendered organizations of power at the site of the interface and the gendered politics of content monitoring. Here social media conglomerates become quasi-feminists despite the anti-feminist conflation of nudity and pornography. This reveals symbolic systems and ideological constructions operative below the screen in the 'unseen' yet ubiquitous realm of software and algorithms.

The removal or 'allowing' of Elmahdy's and Sboui's images on Facebook speak to the material aspects of content monitoring more broadly speaking as well. Facebook manages more than 250 billion images overall, and more than 350 million photos are uploaded everyday on average, according to a white paper published to the site (Kotenko, 2013). As Facebook continues to expand to new markets of users outside of Europe and the United States, these numbers will continue to increase.

Content management on social networking sites like Blogger and Facebook is done through two forms of policing. The first is via nudity detection scripts like Javascript or HTMLCanvas, which can analyze image data to detect nudity based on 'skinrate' percentages (for instance the flagging of 'porn' vs. 'clean' as having more or less than a 30% skinrate). Some blogging platforms, including Wordpress, which also allows the posting of nudity behind a mature content interstitial, uses a software program called Anti-splog, which 'learns' how to detect nude images based on what programmers mark as spam (wpmudev.org). Here, nudity is flattened into the category of a 'spam blog' or splog. Second, programs like Anti-Splog are utilized

alongside functions that allow users to report content that they feel is in violation of the platform's community standards, which is then flagged for review. Here social media platforms are able to commodify community policing by outsourcing the task to its users.

From the point of view of the software itself, Elmahdy's and Sboui's nude images are considered spam, a signification that is replicated in the reporting of nude content, regardless of context by flesh and blood bodies. But what does this mean exactly from a content perspective? As Galloway and Thacker (2007) note, spam is neither 'trash,' which implies something used and then thrown away, nor is it 'junk' which is the category for all things not being used at the moment (p. 146). Spam is what they term an exploit or "a 'hole' in informatics space that is a byproduct of high levels of technological complexity which makes these spaces vulnerable to penetration and change" (p. 82). As a general category spam isn't something to be kept, but as an informational entity, spam is less about protecting a computer from a virus or worm than it is about "the bureaucratic management of data" or "the algorithmic filtering of the meaningful from the meaningless, for marking corralled messages for deletion, or for approving or denying the status of one message over another" (p. 146).

If Elmahdy's and Sboui's nude bodies are spam, then they are also exploits or openings in the programmatic sense of the word, and thus reveal 'glitches' in the social network. Here blacked out nipples and truncated heads become "generative in their mode of signification" (p. 146). In other words, their images are not a simple representations of 'real' breasts on a computer screen. The multiple tiers of

coding languages and filtering algorithms that block or obscure these images points to the processes of filtering, to the channels through which their images as data must travel once they have been blocked (how the information is identified as ‘inappropriate’, where the information goes once it has been identified as such, etc.), and to the material labor of content filtering itself. This is why questions having to do with *why* these women posed naked or who they are *behind* the image don’t actually get at the question of what these images *do*. Nudity as ‘spam’ becomes the excess of signification beyond a more straightforward representation of the body, and this excess of information can exploit power differentials in ways that don’t necessarily correspond to a calculative and rational model of agency. As illustrated earlier, this excess of signification produced by Sboui’s and Elmady’s nudity has to some extent become part of a larger conversation about the gendered politics of Facebook’s anti-nudity policies and their apathy toward gendered hate speech. They also show that not all ‘breast stories’ are the same. Breasts that feed infants are becoming part of the Facebook’s global community standards, but breasts that protest are not. There is no uniform politics of exposure when it comes to gendered nudity, and some women’s bodies are always more vulnerable than others.

The issue of excess and superfluity in the form of spam within the social network speaks to what Bataille (1985) has called a “general economy” of waste, where strategies for dealing with the runoff of content considered *not* appropriate to the community of users must be managed in some way. Content management filters and user reports take care of the flagging, but this is just a redirection. This content runoff must also be evaluated by flesh and blood bodies before being

marked for final approval or deletion. Here the politics of monitoring women's bodies on the network points to another kind of toxic trade in the evaluation of flagged content, the relationship here defined by mapping flows of data to show the material connections between data, communication, politics, and labor. Electronic waste in the form of discarded computers and cell phones is the fastest growing waste stream from the wealthiest nations in the world to the poorest, and flagged content follows the global flows of mercury, cadmium, arsenic and other toxic materials. Content management can be done by filters and software bots, but the



Fig. 15. Contractors working for TaskUs review content on their office computers in the Taguig district of Manila. Source: wired.com

final arbiter on whether or not a particular video, picture or comment is appropriate to Facebook's global community of users is redirected to the company's 'live content

moderators' (Chen, 2012). Companies such as Facebook and Twitter outsource the screening of flagged content to low wage contractors in India, Mexico, the Philippines, Morocco and Turkey, and monitors. Increasingly more of this work is being done in the Philippines, says Chen (2014), who argues that content moderation companies find its status as a former U.S. colony gives Filipinos a unique insight into what Americans find offensive. Hemanshu Nigam, who formerly worked as MySpace's chief security officer and now runs an online 'safety consultancy' firm called SSP Blue, estimates that there are current some 100,000 plus moderators tasked with the 'scrubbing' the worst that social media has to offer, which is 14 times the number of actual Facebook employees (Chen, 2014). These moderators are paid as little as one US dollar per hour (Chen, 2012). Web-based tools for viewing flagged photos and videos are use to 'confirm' the flag, which removes the content, to 'unconfirm' the flag allowing the content to remain, or escalating the report, which redirects the content to a member of the Facebook staff for evaluation. Several team members were interviewed by Gawker, who said of their work with Facebook's outsourcing firm oDesk: "Think like that there is a sewer channel, and all of the mess/dirt/waste/shit of the world flow towards you, and you have to clean in." Said another moderator, "Pedophilia, necrophilia, beheading, suicide... I left (because) I value my mental sanity." As a form of excess, Sboui's and Elmahdy's bodies travel within the same channels of labor exploitation that continue to expand along with the high demand for electronics, access, and global connectivity.

Conclusion

I have considered ElMahdy's and Sboui's naked protests within a field of distributive agency that includes the efficacy of technological platforms of social networking. Together these forces, human and technological, mediate the ambiguous relationships between proprietary networks, sociality, technological interventions, algorithms, ethnicity, postcolonial sexualities, nationality and revolt. Elmahdy's and Sboui's naked interventions have been used to reproduce narratives about the triumph of Western liberal progressivism and Arab female sexual liberation, even as these discourses come into tension with the effects of their particular politics of exposure. More nuanced discussions of their activism have tended to locate these women's bodies as a form of protest against gendered sexual violence in Egypt and Tunisia including forced 'virginity tests,' the arbitrary arrest and detention of female protestors as a form of regime intimidation, and new conservative legislation directed at women's bodies. In this chapter I have attempted to broaden the focus of this discussion to also include the technological agencies at work in the mediation of their bodies, and the possible new frontiers for digital politics and digital activism that we might encounter as a result. To the extent that social media platforms perpetuate a networked logic of sociality, they alter how we think of human community. Elmahdy's and Sboui's nudity speaks to the presumption of the networked subject as the basis for a connected global cosmopolitan citizenry, and how this occludes or distorts the particularities of digital politics, as if participation in the limited sense of using a pre-formed platform was all that was required. The disciplining and managing of their bodies in the

spaces of informatics reveals new channels of “content excess” that their bodies also travel in, which can then be traced to expose new centers of exploitation and new forms of waste with real consequences for real bodies.

Chapter 4

Kingdom of Games: The Digital Heterotopias of Saudi Women

In April 2012, GCOM², a community of female gamers and game developers in Saudi Arabia, held its first women-only convention (GCON)³ in the capital city of Riyadh. In an interview with technology blog *Red Herring*, 24-year-old Tasneem Salim explained that she and fellow GCON co-founders Felwa Al Suwalim and Najla Al Arifi – a group of computer science students-turned-game developers - organized the conference to bring together an already substantial community of ‘gamer girls’ in the country who, until then, had been prohibited from attending gaming conventions as they were held exclusively for men. When prompted, Salim agreed that Saudi Arabia’s specific spatial economy of gender segregation presented a

² As per the request of the IRB, the sources for some images used in this chapter have been obscured so as to maintain the anonymity of the posters.

³ GCOM is the abbreviated term for Saudi’s ‘gamer girls’ community. GCON is the abbreviation for GCOM’s annual women-only gaming convention held in Saudi Arabia. From here forward I will refer to both as GCON following the founders’ other gamers’ use of the abbreviation interchangeably for both the community and the convention.

challenge to women in terms of access to public space for game-related activities, but emphasized that even more challenging was trying to prove their existence to potential conference sponsors. She recalls, “sitting in meetings with Sony, Microsoft and just saying ‘Really, we’re here, we exist, this is a good idea...’ they don’t know that these gamers exist because they don’t see them at events because the events are male-dominant” (Red Herring, 2013).

For GCON’s founders, the inaugural convention was not only about bringing gamers together in a public venue, Salim said, but was also about providing networking and other professional opportunities for women interested in game development and design. According to Salim, game development is a creative option for women who prefer flexible working hours or wish to work from home: “Many studios allow you to work remotely, as programmers, artists, and testers... especially when building for mobile. You can also self-publish on iOS and Android, and have your own income, without the need for a publisher or to work with a studio” (Curley, 2013). GCON also has broad support from male gaming communities within Saudi Arabia. GameTako, an indie gaming community founded by Abdullah Hamed and based in Riyadh was one of GCON’s initial sponsors and regularly collaborates with the group (Curley, 2013). The GCON team is also working on a documentary about local female game developers and members of the Ubisoft team to show ‘growth’ in the gaming industry in the Gulf.

Prince Sultan University in Riyadh, a private institution offering degrees for women and men in computer science and business administration, agreed to sponsor GCON 2012. Prince Sultan University received university status in 2003.

Private educational institutions within Saudi Arabia support governmental education at all levels, which are overseen by the General Department for Private Education at the Ministry of Education (UNESCO IBE, 2007). The founders also managed to acquire sponsorship from several major multinational consumer electronics companies for the 2012 convention, including Sony, Nintendo and Microsoft. Over 3000 female gamers, designers and developers attended the conference over a period of two days (Elan, 2013). The convention in its last three years has held tournaments for games like *Call of Duty: Black Ops*, as well as game developer competitions, game trailer previews, and cosplay (short for 'costume play') competitions, where women are encouraged to dressed up as their favorite game and anime characters. GCON is now one of the biggest women-only gaming events in the world, and has continued to grow in size and sponsorship to include support from PlayStation, Ubisoft, and Verso, a local business incubator working to encourage more women in the industry.

Contradictory images of Saudi women in the media tend to portray them either as stereotypical 'glamorous cosmopolitan entrepreneurs' benefiting from inherited wealth and state-funded education, or within a mosaic of restrictive policies and bans on women's activities and access, where they are portrayed as heavily veiled and highly excluded victims of a patriarchal and ultra-conservative religious society (Al Rasheed, 2013: 1). In the United States and Europe, questions of feminine agency in Saudi Arabia generally center on veiling, and on the issue of rights, for instance Saudi women's right to drive. This issue in particular has received increasing attention as a result of the high profile social media

#women2drive campaign started by Manal al-Sharif. As Al Rasheed (2013) notes, these stereotypes notwithstanding, the 2010 Global Gender Gap report shows that Saudi women lag behind in political influence and economic participation, even though they have higher educational and health scores. Women make up



Fig. 16. Logo of the #women2drive campaign. Source: digitland.blogspot.com

approximately 15 percent of the workforce and 30 percent of the public sector (Le Renard, 2014: 17). Still, the gender gap within the country remains high (129 out of 134) and women are excluded from large parts of economic and political life despite recent increases in employment (citing Hausmann, Tyson and Zahidi, 2010).

Women are also held to contradictory standards within the country, where they must adhere to certain expectations of piety, nationalism, and are encouraged to pursue images of 'emancipation' that cohere to reform projects in new and creative ways, while being delayed or prohibited in others. Women's employment choices, opportunities for mobility, and autonomy with regard to health choices are still very much directed by their male guardians, and despite some inroads in these areas, their exclusion from substantive decision making at the legal, political and social levels are perhaps the most restricted in the Muslim world (Al Rasheed, 2013). That said, in terms of economic and educational opportunities, women in Saudi Arabia are often drawn into 'the domain of production and circulation of symbolic goods' including publishing, writing, journalism, education, and teaching (citing Bordieu, 2002: 92). As Al-Rasheed (2013) notes, this might explain why Saudi women have been so active in the production of things like literary texts and teaching, when they have been excluded from so many other areas of political and economic life.

The GCON convention and its appeal for more educational and employment opportunities for women in the local gaming industry can be located within what Le Renard (2014) describes as an 'archipelago' of public spaces for women within Saudi Arabia that has emerged as a way for women to participate in public life while maintaining the spatial segregation of the sexes. This archipelago consists of a vast network of places where women's presence is considered legitimate, and where men are usually forbidden access. They include women's university campuses, women's workspaces, religious spaces, and consumer spaces such as shopping malls

(6). While allowing for more mobility, they remain highly securitized and controlled (6-7). The development of this network of women-only spaces is a result of Saudi Arabia's strict adherence to gender segregation in public and the homogenization of women's dress in mixed public spaces. It has also emerged as a result of the government's larger 'reform' (*islah*) project under King Abdullah, which incorporates rhetorics of modernization alongside institutional reforms to increase access for and the visibility of women based on a particular state/religious-sanctioned model of femininity that incorporates discourses of nationalism, piety, and professionalism. The regulation of women's private and public lives has been vastly important to this transformation.

It follows then that the organization of gendered space in Saudi Arabia has also been productive of new social categories, new norms, and new identifications for women that are often overlooked in analyses of the social and political relations of the Kingdom (2001: 611). Women's mobility and access is the constant subject of lively debate and discussion within the country, as well as the social and interactional dimensions of these women-only spaces (2014: 6). The topic of women's mobility is also an intensely political, and remains at the center of controversies and tensions with regard to changing practices within Saudi urban areas, youth culture, and other economic and social and transformations that are influenced by these practices (2-3).

It is important to note that GCON emerged as a public community around the time of the Arab Uprisings that began in December 2010, which produced the largest coordinated set of mass protests ever in the region. While many saw Saudi



Fig. 17. An image posted to the GCOM website celebrating International Women's Day, featuring Ellie from the video game Last of Us, and Daenerys Targaryen, 'Mother of Dragons' on Game of Thrones. Author screen shot, July 7, 2014.

Arabia as 'passed over' by these revolutions, there were numerous protests and clashes with the region that were given very little attention the media. Just one month after Mohamed Bouazizi set himself on fire in Tunisia, a 42-year-old man set fire to himself in the eastern city of Dammam at a petrol station according to the Saudi news site Sabq.org. The cite also reported earlier on another man in his late

60s had died in a hospital in Samtah after setting himself on fire in his home. The government refused to comment on whether or not these self-immolations were political acts but the Khaleej Times (2011) cited reports that the first man had done so because of the difficulty he had encountered over many years trying to acquire Saudi citizenship. The self-immolation in Damman preceded the largest and longest protest movement in Saudi Arabia's modern history by Shi'a Muslims in the Eastern province beginning in February 2011, which included physical protests, the dissemination of petitions, and a range of online debates about political reform in the Kingdom around state-led discrimination against Shi'as living within the country (Matthiesen, 2012).

Also, less commented on is the how the uprisings have, as Amar notes (2014), "unleashed global desires from within the popular sphere to imagine anew issues of gender, Islam and culture in the Middle East" (263). This insight is particular useful for thinking about the political climate in which this community emerged as Saudi women gamers tend to avoid commenting overtly on politics online, even when asked directed questions. For instance, when asked for her general opinion on the Saudi government on her Ask.fm account, Salim responded, 'I don't do politics.' When another poster asked if she was 'patriotic' she replied 'I plead the fifth.' These comments make labeling women gamers as uncomplicatedly 'resistant' is problematic. However, as I hope to show in this chapter, desire for change is not only reincorporated into struggles against militarism and fundamentalism (Amar, 2014), but also into desires for new expressions of gender, sexual fantasy, and opportunities global communication and consumerism.

The global gaming industry has exploded in the region over the last few years. The Middle East represents about 2.6 billion dollars in a 70 billion dollar global gaming market, with approximately 105 million gamers, and growth rate of approximately 30 percent per year (Mishra, 2014). Most gaming publishers and distributors focus on the Gulf countries in the region, including Saudi Arabia, the United Arab Emirates (UAE) and Kuwait. More than fifty percent of the regional population is under the age of twenty-five, although it is not only this younger demographic who are playing games (Merza, 2012). In 2011 there were approximately 8.5 million operative consoles in the Middle East, excluding gray and black markets, and those numbers continue to grow (Khasawneh, 2011). Women make up a substantial portion of global gamers, in some places about 47 percent (van Tets, 2012). While there are no official statistics available on Saudi women in terms of the number of players or dollars spent, we can assume, based on GCON's growing number of sponsors and participants, that these statistical trends are relevant to the changing picture of women gamers within the country.

Following this, I want to argue that Saudi women's gaming communities go beyond the stereotypes of Saudi women by resisting certain ontological categories and traditional forms of visibility put forward by liberal feminist interpretations of gendered agency. At the same time they must negotiate conflicting expectations to which women are required to adhere as part of the state's reform project located at the intersections of gender, religion, politics and globalization. While the state's policy of gender segregation limits opportunities for access and mobility, these policies have been a necessary condition for opportunities for female leadership

within the gaming community, something that women gamers are struggling with around the world – not only in the Saudi Arabia. Gaming simultaneously offers an explicitly alternative agenda for women to experience different forms of pleasure, recreation, and expressions of public sociability. And while these activities may not have led to direct confrontations with the government or Saudi *ulama*, the country's religious authorities, it is clear that patriarchal authorities have not been able to determine how these communities have emerged, or the content of their activities. While the 'public face' of this gaming community is focused primarily on growing the convention and promoting media networking campaigns aimed at providing more employment opportunities for women, the digital ethnographic research I have done for this chapter shows that Saudi 'gamer girls' have large online presences on pseudo-public social networking sites like Twitter and Ask.fm, where they role play, exchange gaming strategies, gossip, comment on new tech, and invite questions about their lives.

In a politico-religious space where women's bodies and activities are intensely regulated, gameplay and online gaming communities are largely overlooked by the cultural and legal apparatuses of the Saudi state, in part because these activities are considered a personal form of recreation. As Le Renard (2014) points out in the context of Saudi women's Internet use generally speaking, the anonymity that these spaces afford women gamers allows for some autonomy outside of the family and the dictates of social norms of acceptable behavior for women in the public sphere (101-102). Salim herself acknowledges the tensions between an older generation who sees gaming as "not very lady like" and a younger

generation of players who are regularly online, and for whom gaming and game development is a perfectly acceptable past time and professional venue (Red Herring, 2013). Other gamers have also commented on the negative feedback they have received from family and friends as a result of their interest in gaming. In an interview with *Arab News*, Reem Al-Rashoud, a secondary school student who enjoys strategic planning games like *Battlefield 3* and *Assassin's Creed* said, "When I talk with someone about gaming, I'm immediately viewed as a boy." Shaima Asslali, a 22-year old language and translation student agreed with Reem, stating "Frankly, most people deem it a total waste of time, whereas for boys it is viewed as their natural right!" (Baseel, 2013). Felwa Al-Swailem, also a 22-year-old translation student and self-proclaimed 'hardcore' gamer, says that she is willing to deal with the negative feedback to continue being able to play and participate in a gaming community within the Kingdom: "Imagination is the main thing that attracts me to the games, as I feel I can live the experience, be the hero of the story, and enjoy venturing" (Baseel, 2013).

This chapter argues that Saudi women's gaming communities offer new opportunities for the negotiation of gender norms and expressions of alternative sexualities within what I call *gamespace*. Similar to Wark's (2007) description of gamespace, I define *gamespace* as a far-reaching concept that incorporates not only the so-called 'virtual' spaces of the games themselves, but also the multiple scales of play and communication where games are produced, negotiated, acted upon and even embodied (15). *Gamespace* here includes, but is not limited to, gaming interfaces, social media profiles and platforms, cosplay, and convention spaces. In

other words, any space in which one would negotiate who, how, and in what way one is a Saudi woman gamer would constitute *gamespace*. I would add to Wark's definition to say that *gamespace* must also always be considered within the particular historical, political, economic and social contexts within which these negotiations take place. Saudi women assert claims, take up space, and articulate the legitimacy of their activities and their communities within a particular religious and national context. Thus their particular gendered sociality as it relates to gaming must also appropriate discourses of Islamist morality, entrepreneurship, and professionalism in order to be seen as legitimate in their attempt to insert themselves into traditionally male-dominated forms of leisure activity and employment. However, *gamespace* presents numerous opportunities for non-normative expressions of gender and public sexuality where differences between men and women players are being renegotiated. As a result, these 'gamer girls' have developed a broader nationalistic outlook, albeit through a particular globalized culture of commodification, that offers an alternative to normative expressions of gender and sexuality within the Saudi security state *and* to notions of liberal emancipation. As one gamer deflected when asked if she knew of a girl who wears *abaya* and plays games that he could date, she says only "Why would you assume that a gamer girl doesn't [wear *abaya*]" (Ask.fm).

My analysis of Saudi women's *gamespace*, and how gender norms and expressions of alternative sexualities are manifest in these spaces is inspired by Foucault's (1984) notion of heterotopia. Here, the idea of *gamespace* as heterotopic allows me to consider how the altered experiences of subjectivity and embodiment

that *gamespace* allows for has implications for thinking about the gendered construction of space within Saudi Arabia. Foucault defines heterotopic space as “effectively enacted utopias, where ‘real’ sites within a culture are represented, contested and inverted” (3). His use of the term has been applied in contexts not overt in his essay, including the ‘virtual city’ of the Internet (Gordon, 2003). These places are not utopian in the sense that they present a better world, but as Foucault argues, present a ‘real’ space in which utopian expectations are played with, and which has the effect of ‘dissolving our myths’ (464) about what these spaces appear to be or appear to represent. Thus the notion of heterotopia presents a productive way of thinking about the multiple networked spaces that comprise Saudi women’s game space as both real and ‘virtual’, although always material. It also opens a theoretical space for thinking about the agency of technology, software, and gaming interfaces as also being productive of the experience of *gamespace* and processes of subjectification. Saudi Arabia’s community of women gamers are connected through multiple sites and channels of play where one’s identity as Saudi, female, and a gamer are performed and enacted on Facebook profiles, Twitter accounts, in gaming conventions, during costume play, in the expression of play as a form of piety, during game development competitions, through educational programs, gaming engines, video game narratives, and even programmatic languages. All of these examples represent counter-sites that act as heterotopic ‘mirrors’ to reflect how gendered politics and gendered space within Saudi Arabia is negotiated through the life worlds of these women gamers.

Methodology

The limited historical knowledge about and contemporary scholarship on Saudi women presents a problem for researchers, as Saudi women's gender issues remain relatively understudied as compared to other Muslim women (Al-Rasheed, 2013: 3). The Internet has changed this somewhat, however most academic work on the Peninsula has and still focuses on the country's colonial past as a British protectorate, its position as a clientalist state of the US, its internal state politics, and issues related to oil, security, and Islamism (33). Fieldwork-based research is somewhat scarce, and male scholars working on Saudi Arabia have tended to disproportionately benefit from their identities as men with regard to access and mobility in the geographies of the Gulf. These men would have found researching women more difficult in Saudi Arabia as well, given the spatial segregation of the sexes within the country (33). A notable exception is Al-Rasheed's (2013) book, *A Most Masculine State*, which incorporates fieldwork and historical and social analysis on gender issues within the Kingdom. Al-Rasheed's work, Sadeka Arebi's (1994) book on Saudi women writers, and Amelie Le Renard's (2008; 2011; 2014) explorations of young women's strategies of sociability in the urban centers of Riyadh have been influential in this chapter in terms of my thinking about Saudi women's *gamespace* in the context of a broader picture of Saudi society and its unique forms of gender segregation. I am also inspired by Saba Mahmood's (2005) and Lila Abu-Lughod's (2001; 2013) work, which challenge the subjective limits of liberalism in cultural theory, and offer opportunities for opening up spaces of

thinking about Saudi women's agency and autonomy in complex global societies and polities.

The original research for this chapter is based on a digital ethnography of Saudi women's *gamespace* over eighteen months in 2013-2014, a period that has been characterized by mass increases in internet users within with Kingdom as well as increased state control of online activities, in part as a result of the regional upheavals and governmental restructuring beginning in December 2010. During this time I evaluated over 1500 tweets in both Arabic and English on publically available profiles by fifty-three Twitter users who identify as 1) women; 2) Saudi; and 3) gamers. I also evaluated several hundred images posted to Twitter and Instagram marked either by their hashtags (i.e. #gcon2013) or because they were posted to the gamer's profile. In addition to these sites, I also regularly evaluated posts and information made available on the official GCOM website, which features information on gaming for the community including game reviews; the GCOM Facebook page; images from the 2012 and 2013 GCON conference; approximately two hundred anonymous questions and answers posted to four women gamer's Ask.fm accounts; and three hours of Tubecasts and Podcasts in both Arabic and English about GCOM and the GCON convention published by members of Saudi's male gaming community including Saudi Gamer and Arab Gaming Geeks.

Following this, my chapter does not represent a limited empirical attempt to 'prove' which activities and tactics are reversing the role of gender segregation in the Peninsula, or encouraging more rights for Saudi women in a liberal sense that tends to focus on the content of laws with regard to individual rights and the shape

of public morality based on legal equality between men and women in the realm of voting, property, and so forth. Given the multiple institutional, religious, structural, individual and gendered factors impacting the 'status' of women within Saudi society, explanations on the causal impact of gaming on these arrangements would necessarily overlook the micro-interventions of this community in terms of shaping new national publics and discourses on gender normativity. Rather my use of social media as a space for ethnographic research attends to how people and technologies together make up particular practices that constitute Saudi women's *gamespace*, and the implications of these engagements broadly conceived. Like other media scholars and digital ethnographers working in a similar vein who are moving away from the dominant paradigm of 'community' in Internet research, I focus on routines and habits, the plasticity of these habits, on movement and flows, and on the question of relationality for horizontalizing how we think about sociality (Postill and Pink, 2012). While not dismissing traditional forms of ethnography that focus on face-to-face encounters and on the ground observations, Hine's *Virtual Ethnography* (2000) provides a compelling case that ethnography need not be undertaken in the form of fieldwork at specific localities whereby the researcher travels to a physical site (43). However this type of research can and should be interwoven with scholarly work on the political structures, societies, histories and localities under review as well as onsite ethnographies if and when possible. Hybrid methods allow for insight from both the continuities and discontinuities between what is perceivable to the digital ethnographer and what is perceivable 'on the ground' which can be discerned in different ways and do not always require somatic

presence. Taken together, this process is one of making ‘ethnographic places’, which Postill and Pink explain (2012) “are constituted through the emergent relations between things and processes...they are not bounded by territories or groups/communities. Rather they are clusters or intensities of things of which both localities and socialities are elements” (2). I use digital ethnography to explore how video game culture among Saudi women is changing the gendered dynamics of sociality and politics within the Kingdom. I also see this chapter as a preliminary research platform for future research that will incorporate fieldwork in the traditional sense to explore feminist and queer media praxis among women gamers in the Gulf.

Finally, my analysis of Saudi women gamers is inspired by existing scholarship that explores the relationship between computational and social analysis, and specifically how video games themselves are fields of discursive production (Bogost, 2006). Following Bogost’s work on procedural criticism and video game theory, I am similarly interested in the principles that underlie both the computational organization of video games and the organization of sociality and politics – and in this context, the gendered politics of Saudi Arabia. As such, my analysis of video games and Saudi gaming cultures moves between theoretical and empirical registers in a comparative analysis of the two that incorporates area studies, critical theory and computational media in an interdisciplinary engagement with this problematic across fields and modes of inquiry. Thus it is as much an exploration on the social and political interventions of Saudi women gamers in

Saudi society as it is a potential model for future collaborative engagements between area focused research, social analysis, and science and technology studies.

Gamespace as Heterotopic

In his lecture *On Other Spaces*, Foucault (1984) describes heterotopias as spaces ‘in relation with all other sites, but in such a way to suspect, neutralize, or invert the set of relations that they happen to designate, mirror or reflect” (3). For Foucault, heterotopias are ‘real’ sites that are differentiated from utopias, which he defines as ‘sites with no real place’ (3), however they are also offered as counter-sites to normative arrangements of space, territory and power (cited in Salter, 2007). As Gordon (2003) points out, the term heterotopia is evocative of meaning previous to and beyond Foucault’s use of the concept, at the same time that it is generative of meaning originating from his use (463). ‘Hetero’ in Greek means other (of two) or different, which is the opposite of ‘homo’; ‘topia’ is the word for place or location. Combined, the word heterotopia comes to define an ‘other’ or different place – a “multifarious place....with many distinctive neighborhoods and species...a place made up of other places or of many elements, a hybrid place” (463). These other places can also be in dialectical relation to alternative spaces, creating a ‘feedback loop,’ to borrow from William Connolly (2002), that speaks to “complex relays joining bodies, brains and culture,” and where institutions “become infused to variable degrees into dispositions, perceptions, beliefs and resistances we share and contest with others” (19). . Although Foucault does not consider *gamespace* in his analysis of heterotopias, as Salter (2007) notes in his discussion of the airport as

heterotopic, Foucault's focus on governmentality and territory is useful for thinking about how particular power relationships and social norms can be either demonstrated or subverted through particular spatial arrangements (51-52).

Gamespace as a mosaic of human bodies, social media profiles, user interfaces, video games, conventions, and discourses about Saudi gamers, all comprising a multifaceted environment where dominant doctrines of modernity, reform, spatial segregation, entrepreneurship, and technical innovation are challenged by the multiple layers of communication and subjectification that happen in these 'other' spaces. These heterogeneous spaces represent a challenge to the policing apparatus of Saudi state, where religious edicts, social norms, legal structures, and surveillance technologies work together to create normative and material social, political and legal orders of segregation.

Women's gaming communities in Saudi Arabia have also emerged in the context of contemporary class relations and security practices that have shifted in response to changing immigration patterns and geopolitical alliances, and these shifts have come to impact question of sovereignty along several axes. For instance, the local gender and ethnic composition of citizenship has changed as a result of the migration of female workers from Bangladesh, Pakistan, and other parts of South Asia who reside and work in the Kingdom in large numbers (Joseph, 1996). Recent figures show that women make up a high portion of immigrants coming into Saudi Arabia (OECD, 2013), most of whom do not have access to these communities and are thus not offered the same opportunities of subversion. Also, representations of the sovereign embodiment of the Saudi nation have changed in response to conflicts

and tensions between Arab countries with oil wealth and those without (Wynn, 2007: 5). Finally, global consumer cultures have affected discourses about public morality in new and unpredictable ways. An example of this that I discuss later in the chapter is how women use gamespace as a place to negotiate both the indulgences of cosplay and the taking on of particular character's identities while also acting within the dictates of proper pious behavior. It is within these contexts that Islamic piety movements, the *mutaween*, or religious police, and the clerical institution have intensified their targeting of gaming and other online communities in the form of the banning certain games, for instance Pokemon which is said to promote gambling (BBC, 2001), and books like *Hawjan* which is said to promote 'sorcery' (El-Gizuli, 2013).

Internet censorship is an important part of managing these changes within Saudi society, and Foucault's description of 'architectures of control' in the context of heterotopias is useful for thinking about Internet filtering and content management within the Kingdom, as well as how *gamespace* works to contradict these controls. Architecture, Foucault states, "is no longer built simply to be seen, or to observe the external space, but to permit an internally articulated and detailed control – to render visible those who are inside it; in more general terms, an architecture that would operate to transform individuals: to act on those it shelters to provide a hold on their conduct, to carry the effects of power right to them, to make it possible to know them, to alter them" (1977: 172; cited in Salter 2007: 51-52). A 2004 Open Net Initiative report details the Saudi government's sophisticated online filtering system through a combination of commercial software provided by

the United States (called Secure Computing's 'SmartFilter') which provides both technical support and suggestions for site blocking, local expert staff with the Kingdom, and Saudi citizen input on over- and under-blocking according to a set of filtering criteria provided by the Kingdom's Internet Services Unit (ISU) (OpenNet Initiative, 2004). According to the report, the Open Net Initiative tested over 60,000 web addresses over a three-year period to determine what types of content the government's filtering apparatus focused on. Sites that tested 'blocked' included pornography (98%), drugs (86%), gambling (93%), religious conversion, and sites providing tools to circumvent filters (41%). While Saudi Arabia passively blocks sites on gay and lesbian issues, women's rights, sexuality, politics, and the 'occult', in contrast to the above categories, the report found that the government showed less interest in filtering sites on gay and lesbian issues (11%), politics (3%), Israel (2%), religion (1%), and alcohol (OpenNet Initiative, 2004). Here, 'passive' blocking refers to a pattern of more limited filtering regimes, where the ISU responds to block requests, but generally pays less attention to this type of content than to the previously listed categories of content (i.e. pornography and drugs). Saudi Arabia targets content related to, for instance, pornography and drugs more aggressively in accord with the 2001 Council of Ministers decree banning such content. The ISU cites both the Quran and an American law review article by Cass Sunstein (1986) titled *Pornography and the First Amendment*, which correlates restrictions on pornography with reduced rates of murder and rape (OpenNet Initiative, 2004). These filtering trends reveal certain normative interpretations of what types of content that the state sees as the most disruptive to regime stability and religious

protocols. It also reveals how subjective the process of content filtering can be in this context to the extent that the country uses SmartFilter, thus allowing an American company to make many of these calls on what is and is not appropriate content for its citizens and inhabitants (OpenNet Initiative, 2004).

Since the uprisings of 2011, the Saudi government has introduced new regulations regarding Internet use in the country. Today, all online newspapers and bloggers are required to obtain a special license from the Ministry of Culture and Information. Under this new legislation, all online writers – which appears to include forums and short messaging like Twitter – must acquire a license, which is valid for up to three years. Applicants must be Saudi, at least 20 years old, have graduated from high school, and are required to provide ‘documents testifying to their good behavior’ (Woollacott, 2011).

It is within this framework of the regulation of ‘public’ space on the Internet that Saudi women gamers must negotiate. Saudi women’s *gamespace*, is, in some ways, a reflection of what Foucault terms ‘crisis heterotopias’ (1984: 4). Crisis heterotopias in represent spaces such as convents, boarding schools, and military academies, where dangerous rites of passage are spatially contained through technology and policing. Crisis heterotopias, Foucault argued, are being replaced by “heterotopias of deviation: those in which individuals whose behavior is deviant in relation to the required mean or norm are placed” (Foucault 1984: 5). Consider comments made by Riyan Najm, Chairman of Saudi Arabia’s General Commission for Audiovisual Media, who responded that new restrictions requiring a license for posting content to YouTube were necessary “to contain the youth’s energy, which

entered this field without knowing what the allowed ceiling is” (Noman, 2013). Saudi Arabia has one of the highest numbers of bloggers in the Middle East (Woollacott, 2011), and according to the GlobalWebIndex has the highest percentage of active Twitter users among its online population in the world (Mari, 2014). Saudi women’s *gamespace* in many ways fits this description of a crisis heterotopia, where ‘deviant’ individuals or those going through rites of passage are isolated through the arrangement of space, technologies and authorities (Salter 2007: 52). The surveillance of social media and the sanctioning of gaming conventions through organizational sponsorship approved by the government provide the institutional structure for the state to ‘know’ this population in order to manage it. The most productive lines of comparison can be found in Foucault’s description of heterotopias as “capable of juxtaposing in a single real place several places, several sites that are in themselves incompatible” (cited in Salter, 2007: 52). Here the national, international and global spaces of communication and consumerism are all proximate, if not coterminous, in *gamespace*. Further, as Salter (2007) notes, ‘heterotopias always presuppose a system of opening and closing that both isolates them and makes them penetrable’ (52).

A consideration of Saudi women gamers’ social media profiles shows how structurally and functionally they act as repositories of material culture through, for instance, the collection of static images, for instance anime dolls, convention tickets, costumes, illustrations of favorite gaming characters, gaming posters, and so forth. Social media as heterotopic space is linked to what Foucault calls ‘slices of time’ where individuals break with their normal experiences of chronology. Reid-Walsh

& Mitchell (2004) illustrate how time in social media is both accumulating and transitory. Like a museum or a library, a profile gathers and archives thoughts, wishes, pictures of one's bedroom or toys, conversations, outbursts, gaming trailers, music videos, and so forth that can be considered a repository of one's gaming life world.



Fig 18. Image from the social media profile of a GCOM member. Source: anonymized.

Fig. 19. Image from the blog of an aspiring female game developer in Jeddah. Source: anonymized.

At the same time, the transitory nature of these profiles pages is quite evident when someone has, for instance, not updated their profile page for an extended period of time (180), which also highlights the transitory nature of *gamespace*. Gaming interfaces also act as intermediaries to the past and future in games like *Quraysh*, a strategy game that takes place during the time of the Prophet, or *Last of Us*, which projects players into a post-industrial zombie dystopia. Following Foucault's fifth principle, social media as an aspect of *gamespace* points to certain openings and

@GCONRiyadh im cosplaying as vaas, but he sometimes swears, is it ok if i do to? Sorry



FAVORITE
1



4:28 PM - 29 Jun 2014



GCON @GCONRiyadh · Jun 30
@wolv_x You can cosplay as Vas, just keep it PG13 :p

2 1

Fig. 20. Author screen shot; poster anonymized. July 17, 2014.

closings that make them both isolated and penetrable, and thus “not freely accessible like a public place” (Foucault 1984: 7). For instance, one must also have a social media account to view or participate in *gamespace*, have access to resources for purchasing or playing games, and must adhere to certain normative protocols in terms of what is and is not appropriate behavior within gamespace, which is determined in part by the community itself. For example, consider a question posted by a gamer to the GCON Twitter feed (Fig. 4) asking if it is appropriate to curse when cosplaying as the character Vaas in *Far Cry 3*, an open world first-person

shooter game. The moderator answered that cosplaying the character is fine as long as she keeps it 'PG-13'. Here, GCON's women moderators become the arbiters of appropriate behavior with a particular social and moral context while 'playing' a fictitious character.



Fig. 21. Source: GCON Twitter feed. Author screen shot June 17, 2014.

The conscious linking of *gamespace* to expressions of piety offers new ways that women can appropriate religion, while expanding opportunities for mobility, leisure and employment while gaining more public acceptance of their activities and communities – even if this is not their stated goal (Le Rendard, 2010). There is a concerted effort, particularly around the time of Muslims holidays, for the GCOM

community to draw connections between piety and *gamespace*. For example, the heterotopic linkage between the Super Mario Brothers game series and Eid ul-Fitr, a festival of breaking the fast during Ramadan, presents a unique configuration for thinking about how the ‘women question’ is posed at the intersection of state and religious authority and *gamespace* in that within the Kingdom “religion is a ubiquitous point of normative reference in education, the media, and political discourse... and reliance on Islamic sources is indispensable to any argument that seeks acceptance in the public sphere” (Le Renard, 2014: 2).

As I have tried to show here, *gamespace* and heterotopias share many of the same characteristics. In the following section I will discuss how while virtual space can at times allow for particular forms of escape in gendered moralities and identities through ‘playing’ as 18th century assassins, ‘black’ operatives, aliens, survivors of a zombie apocalypse, and hybrid human-animals, *gamespace* is still shaped, in part, by other sets of values and identities that are determined by developers and the programmatic languages of the games themselves. It follows then that *gamespace* is neither a virtual ‘non-space’ nor is it a space of continuous and unobstructed flow (Castells 1982; cited in Salter, 2007). As such, it presents a counter-argument to the notion that social media and games represent an open and uninterrupted flow for communication and play. Instead, the common experience among Saudi women gamers is one that is “marked by homogeneity, ambiguity, and anonymity, [and] transforms multiple spaces into a sense of singular place” (Wood 2003: 326; cited in Salter, 2007). Women’s activities in the ‘virtual’ space of the game and on social media, have direct impacts on ‘real’ space and real behaviors and

activities, which are also reinforced as a result of the relationship between the gamers themselves. Still, despite these limitations, like the archipelago of women-only spaces that enable the cultivation of homosocial relations between Saudi women where “certain modern and consumeristic feminine lifestyles are displayed” (Le Renard, 2011), *gamespace* also allows for more autonomous relations and anonymity outside those of the family and spaces of normative public sociality.

Alien Adventure and Refracted Bodies In and Out of the Game

In the previous section I’ve tried to explain how I used the concept of *gamespace* to provide some preliminary insight into an important question that Shaw (2010) poses, that is, how communities are defined by the consumption of a particular medium. Video game culture is often thought of as something that is both relatively recent and falling outside of mainstream culture, with recent scholarship on gaming focusing on knowledge production, identity, representation, performance, and mediation (Shaw, 2010). Saudi women’s gaming communities certainly differs from, for instance how the US media defines video game culture. Thus we should not simply superimpose existing theories of ‘game culture’ onto a consideration of Saudi women’s gaming communities, but rather employ a critical and reflexive approach to thinking about the function of games as a social and political medium.

Following this, I’d like to suggest that GCON is not only an expression of the multiple tiers of female-only spaces within Saudi Arabia, but is also expression of an important conversation happening within Saudi Arabia about the growing

popularity of science fiction as a genre in the Kingdom, and its relationship to Wahhabi religious nationalism. Wahhabi religious nationalism is a politicized religious project in which Wahhabism,⁴ an ultra-conservative form of Islam, is held up as the foundation of a national project to incorporate a diverse and fragmented group of communities and tribes for the purpose of creating a 'godly community' that is intimately linked to the identity of the state (Al-Rasheed, 2013: 16; see also Friedland, 2001). Like secular nationalism, Saudi Arabia's particular form of religious nationalism also seeks to maintain women and family life in the 'private' sphere as a way of maintaining the religious purity of the community, and women are both the visual and rhetorical symbols of proper pious nationality.

Science fiction as a genre has become increasingly popular in terms of books, films and games in Saudi Arabia, as well as in other countries in the Gulf including Qatar and the United Arab Emirates. Media coverage of sci-fi's growing popularity in the region has tended to fall within one of two categories. The first is an ambiguous fascination with the Gulf's futuristic architecture and mega-development projects, such as the Palm Islands in Dubai and the Burj Khalifa, currently the tallest building in the world. The second generally focuses on bans, repression, and sometimes extreme forms of punishment, for instance beheadings for practicing 'witchcraft' and other occult-related activities, although these sentences are often highly politicized and do not generally apply to Sunni Saudi nationals (Perlmutter, 2013). Consider the short yet ubiquitous media life of the story about the fatwa on travel to the planet Mars by the General Authority of Islamic Affairs and Endowment

⁴ Some adherents prefer the term Salafism. See Madhi, 2010.

in the UAE. The space travel ban was issued in response to more than 500 people from Saudi and other Gulf countries signing up for a spot on the Mars One Mission (Williams, 2014). The recent banning by the Committee for the Promotion of Virtue and Prevention of Vice of best-selling Saudi fantast/sci-fi book



Figs. 22 and 23. Images of the book *Hawjan* taken at the GCON 2013 conference. Source: anonymized. Author screen shot. October 20, 2014.

Hawjan by Yasser Bahjatt and Ibraheem Abbas is another example. The book was banned for its incorporation of the religious theme of the *jinn*, morally ambiguous and supernatural creatures found in the Quran who inhabit multiple dimensions, and can act on human affairs. In an interview with *Foreign Policy*, Bahjatt laments the state of the genre within the country, pointing to string theory to explain the existence of jinn and other multidimensional beings: "...we believe Islam is a scientific religion, so we try to explain the claim of existence of such beings through speculative science" (Fossett, 2013). GCON 2013 featured a trailer for *Hawjan*, and many attendees posted pictures of their hands holding the book at the conference to social media.

In a 2012 TED Talk, Bahjatt, a computer engineer by profession and founder of The League of Arabic Sci-Fiers, suggested that the correlation between the number of sci-fi publications and the number of registered patents in a region meant that high levels of research and develop correspond to a robust science fiction scene



Fig. 24. Bahjatt: “How Arab Sci-Fi Can Dream a Better Future.” Published June, 20, 2012.
https://www.youtube.com/watch?v=MdWPM_Vy-Zw

with popular culture. Bahjatt made his argument in front of a giant screen where metal wind turbines and Google’s ‘Big Dog’ military robot were presented alongside one another in a flattened exemplification of innovation and progress (TED 2012). Bahjatt’s presentation in many ways illustrates acceptable discourses on science fiction in Saudi Arabia, where technology is situated within depoliticized discourses of modernity and progress, and things like ‘innovation’ and ‘progress’ are seen as uncomplicatedly positive. Rather than view science fiction as a form of critical social commentary, the genre is co-opted into a discourse where “liberal

globalization is made sensible through imagery, which integrates science, technology, business and images of globalization into a kind of entrepreneurial frontier masculinity, in which capitalism meets science fiction” (Weldes, 2003).

GCON has also been at the forefront of the ‘sci-fi revolution’ in Saudi Arabia. The October 2013 conference adopted the theme “SciFi, the Future, and ‘What If.’” The conference website invited gamers to enjoy the conference “in the moods and spirit of SciFi everywhere.” When asked about the theme in an interview with Nina Curley for Wamda (2013), an online platform that spotlights small businesses and entrepreneurs in the MENA region, Salim said, “We are calling upon people to imagine a future through games and through creative industries that we can apply to our culture. We believe that societies that don’t have a sci-fi culture don’t evolve. We’re hoping to start a spark and talk about local sci-fi, and how we as girls can develop the future” (Curley, 2013). Salim’s remarks to various commentators on her Ask.fm account echo similar points made by Bahjatt’s in his 2012 TED talk. When a poster suggests that Salim’s ‘obsession’ with sci-fi is detracting from ‘real life’, Salim responds: “Art partly serves an escape from reality, but I’m not ignoring it, I just prefer alternative realities with far fetched scenarios...Also, cultures without sci-fi rarely develop, or so I believe ☺”. When asked by another poster in the forum how she envisions the future in twenty years, she replies, “If there are no aliens, hover cars and direct brain downloads, I’m really not interested.” (Ask.fm/TasneemSA).

While both Bahjatt and Salim draw on science fiction as a path to ‘cultural evolution,’ they seem to differ on the question of nostalgia. Bahjatt contextualizes

his appeals to the genre within references to works like *Arabian Nights* as evidence of the region 'tinkering with the world's imagination' for centuries, while simultaneously referencing a utopian vision of the 'Golden Age of Islam' when the region was leading the world in scientific discovery, literature and art. In my reading of Salim's online commentary, her vision of GCON is less contextualized by a nostalgic vision of a past Islamic utopia reconceived through science fiction culture, and instead plays more with a post-human vision of technology (ie. 'brain downloads'), one that Braidotti (2006) explains in her discussion of posthumanism as less rationalistic and more open in terms of its "potential for change, imagination, and fantasy in the production of scientific discourse" (199).

This brief discussion Salim, Bhajatt, and their thoughts on the state of the sci-fi genre within Saudi society provides some context for observation that science fiction and fantasy appear to be the most popular genres among Saudi women who identify as gamers. In fact, Saudi women regularly post online about their love of sci-fi, making references to television shows like *Dr. Who* and *Fringe*, and sharing lists of their all time favorite fantasy, horror and sci-fi games including *Last of Us* ("because it's beautiful"), *Resident Evil 3: Nemesis* ("because it was a kick ass game") and *Half Life 1* and *2* ("because nostalgia"). Here I am interested in how the theme of science fiction in Saudi women's *gamespace* in terms of consumption and design intersect with the issues of gender, and how the two are co-constituted in the context of genre preferences, and questions of skill level and mastery (Fantone, 2003). How does the theme of science fiction relate to Saudi women's multiple pleasures derived from the experience of game play? Is gaming a way for Saudi

women to mitigate or distract from the complexities of 'real life', as the previous poster suggested? Is pleasure derived from 'taking control' of a particular environment, or perhaps in indulging in fantasies of scarcity and apocalypse? What other unpredictable ways might game play lend itself to thinking about the interactivity of the interface and the embodiedness of game play?

Donna Haraway invites us to think about how bodies and gender systems are constructed through technologically mediated practices through what she terms the 'informatics of domination' (1990, 163). She presents a image of power is less about normalized the normalizing heterogeneity of biopolitics, and more about networking, communication, redesigns and multiple connections in post-industrial systems of production (cited in Braidotti, 2006; see also Deleuze on 'Control Societies'). Women, says Haraway (1990), have been "cannibalized by these technologies and have disappeared from the field of visible social agents" (163-164; cited in Braidotti, 2011:104). Her vision of the cyborg inserts an "oppositional consciousness at the heart of the debate on the new technological societies," and "highlights issues of gender and sexual difference within a much broader discussion about survival and social justice" (Braidotti, 2006). Thus the question of power relations and of ethical and political resistance emerges as relevant in the age of informatics of domination (Haraway, 1990: 163), but must also be historically and socially contextualized.

I find it productive to think about questions of technology, gender and embodiment posted by Haraway and Braidotti alongside questions of how video games function as texts, and interact sociology with other elements in *gamespace*.

In particular I am interested in the software and narrative structures of *Alien Adventure*, an example of a ‘culturally appropriate’ and award winning educational video game developed by a group of Saudi women for the Saudi Girls Gaming Convention game design competition in 2013. *Alien Adventure* is an example of how video games are material intersections of political commentary and computational media that allow us to consider specific trends within game development as part of a broader social project, which can also be disruptive to normative expressions and performances of gender.

My reading, in what follows, of the relationship between social criticism and computation uses Bogost’s (2008) notion of unit operations for thinking about how modes of meaning making happen within games as a series of protocols and commands, and how conceptualizing unit operations within games lends itself to thinking about discrete interventions in politics and social life at the micropolitical level. Bogost defines *unit operations* as “modes of meaning making that privilege discrete, disconnected actions over deterministic, progressive systems” (Bogost, 2008: 3). Further, *unit operations* “are characteristically succinct, discrete, referential and dynamic... they privilege function over context, and instances over longevity. Systems, on the other hand, are characteristically protracted, dependent, sequential and static” (4). Here, *unit operations* as a conceptual tool for thinking about gaming cultures and how different social, discursive and affective assemblages that are operative in the game work on individual and collective desire at the level of unconscious affect (Patton, 2002: 39). Like Deleuze’s notion of

micropolitics, *unit operations* are discrete forms of intervention in political and social life at the level of computation.

The value of thinking about gaming at the level of *unit operations* and the extension of this thinking to the concept of micropolitics is useful for showing how political and social assemblages, what Bogost (2008) might call 'system operations,' are not singular authorities that act on a population or an individual in a unidirectional way (6). Examples of 'system operations' in this context would be 'the state' or 'Wahhabism.' This is not to say that the state or religion don't act on subjects, or that units and systems are in binary opposition to one another. Systems are still important, but they are reconceptualized in this context as open, flexible and fluctuating assemblages made up of "the spontaneous and complex result of multitudes rather than singular and absolute holisms... Systems are a fluctuating assemblage of unit operational components rather than overarching regulators" (4). The difference between systems of units and systems as such is that the former "derive meaning from the interrelations of their components whereas the latter regulate meaning for their constituents" (4). As Bogost suggests, "there is no skeleton key that exists for social pathology" (6). Thus the nature of Saudi politics, specifically gender politics, is not about simply crafting a map of state and religious institutions, edicts and processes that people simply follow, but rather require an attention to complex configurations of bodies and technologies that shape and affect human behavior.

So what does the game *Alien Adventure* as a text 'say' about the communities of practice from which it has emerged? *Alien Adventure* is a game designed by 4D, a

team of female computer science and mathematics graduates led by gamer Samar Al Hussein. In an interview with *ArabNet*, Samar describes the game as “an educational adventure and sci-fi game for kids in elementary school to help them with science and physics...It tells the story of an alien found by astronauts during an exploration mission to a planet and that alien’s journey and adventure to go back home.” The player uses the principles of physics and matter to “help the alien reach its destination” (Chaaya, 2013). *Alien Adventure* is a game about the nature of matter, but it is also a game about the nature of human relationships to the ‘other’, where the alien uses its knowledge of physics and natural science to escape the cruelty of its captors and return to its planet. In a YouTube video featured at the GGDC 2013 Educational Game Development competition (for Saudi women only), the game starts off with a series of illustrations telling the story of the alien. The alien isn’t ‘found’ by astronauts. It tried to run away from the astronauts who chase the alien and then forcibly take it back to earth. In the next series of images featured in the game, the astronauts have changed out of their suits and are now revealed as two men dressed in *thawb*, a white dress robe commonly worn by males in Iraq and the Persian Gulf. The men pleasantly observe the alien, whom they have placed the alien in a glass jar with a sealed lid. In the last series of images the glass jar is placed in a locked metal cage. At the start of the game, the alien remains trapped in the cage until it realizes that it can take on the properties of the objects it touches. Inside of the cage there is a sponge, a bowl of water, and what looks like food in a bowl on the floor. By touching the sponge and then touching the bowl of water, the alien is able to squeeze through the bars of the cage. Subsequent levels of

the game are characterized by similar protocols. To escape its captors, the alien must advance closer at each stage to the rocket ship that will eventually take it home by answering correctly a series of questions about mathematics and physics.

Thinking about how video games inform, change or otherwise participate in human activity requires a focus on the expressive capacity of the game and what it reveals about its developers and its targeted audience (Bogost, 2008: 53). *Alien Adventure* is culturally appropriate in that, from a purley functionalist perspective, the development of the game utilizes the expertise of Saudi women in the fields of computer science, an acceptable area of study, to create an education game for girls and boys in an equally acceptable field of study, that is, physics and mathematics. Videogames are complex software programs, where common elements such as the state and behavior of an object (for instance, an alien with two legs that can also jump) and other features such as how light is reflected are created from maintainable code that is abstractable (and thus extendable to different features of the game or to different games) in the form of object-oriented programming. A game engine is the software framework for creating a game, including elements of sound, graphics, networking, streaming, animation, and memory

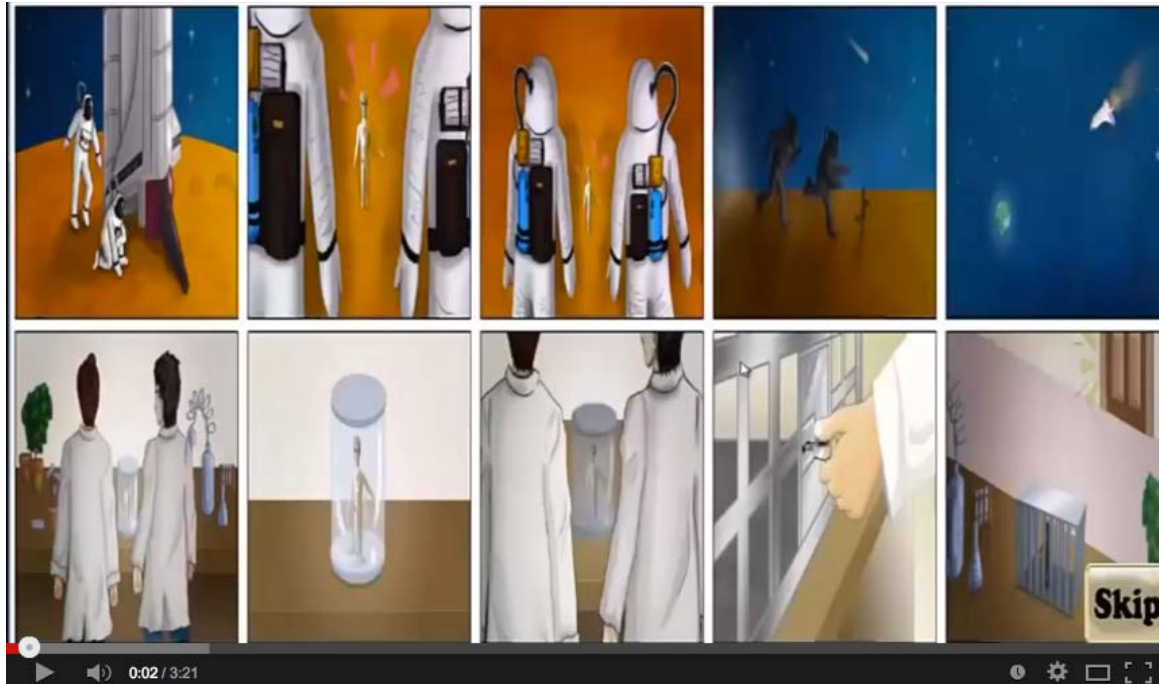


Fig. 25. Author screen shot of introductory narrative for Alien Adventure. Source: <https://www.youtube.com/watch?v=uysaN8jcHOs>

management, and the engine can be used to design many different games. For instance, the first-person shooter (FPS) engine has played a fundamental role in founding the industry of game engines. As Bogost (2008) notes, “creating a new version is mainly a matter of editing and then recompiling a program file; the end result can be as similar or different from the original as the programmer wants” (55).

Equally important are the aesthetic and narrative dimensions of the game, which reveal how players interact with, respond to, participate in, and “extend and revise the cultural expression at work in other kinds of cultural artifacts” (55). Women’s education and participation in the workforce have been essential to the project of reform under King Abdullah and his ‘nationalist revival’ (Al Rasheed, 2013: 4), and GCON has positioned itself as an avenue for improving the quality of

local education by not only providing opportunities for women in the field of game development and design, but also in the creation of curriculum and the development of games as pedagogical tools in early Saudi education. Naming education as the theme of its 2013 game development competition is certainly not arbitrary, as by doing so GCON solidifies its legitimacy in a culturally appropriate area of economic and social entry. The second place winner of the competition speaks to this as well, which featured a game using miniaturized characters that journeyed throughout the human body to teach children biology.

As Huizinga (1971) shows, the point of 'playing' education is not to make education more efficient or make learning more attractive. The point is that the subject matter itself is already playful (cited in Rodriguez 2006). While GCON's popularity is grounded in the growing trend of Saudi women seeking out careers and education in the 'hard' sciences and its hopes to channel those skills into viable jobs for women in the gaming industry, the group also wants to provide a space to "encourage newfound creativity" in Saudi Arabia. Says Salim, "We are calling upon people to imagine a future through games and through creative industries that we can apply to our culture...We're hoping to start a spark and talk about local sci-fi, and how we as girls can develop the future" (Curley, 2013). Considering these comments alongside Huizinga's (1971) discussion of serious games, we are encouraged to think about what aspects of the subject matter in question (science) already has playful or ludic features, and how the designers have exploited or highlighted these features.

Alien Adventure is an example of what Huizinga calls 'acting apart' in terms of thinking about the separateness of play from 'real' life (10; cited in Rodriguez, 2006). When we enter a game, we are participating in, to a certain extent, a new, self-contained sphere, "underwritten by experimentation, role-play, risk taking, or otherwise impossible or undesirable in the real world" (Bogost 2008b). As Bogost notes, this experience is not entirely dissimilar from reading a novel or watching a film. We interact with writing, images and sounds, and we both perform and experience action – either in the form of work, play or something mundane and in-between (2008b). In other words, gameplay is also always an embodied experience. In *Alien Adventure*, players' actions make the game work. They control the alien, they make the alien move, they figure out problems and answer questions, they bounce on trampolines, breath underwater, change the chemical composition of their skin, and make choices about the best routes of escape.

Gamers also perform actions outside of the game that take on meaning at the same time that they perform them 'in' them game. A reading of the overt metaphors expressed in the programmatic operations of the game reveal a similar opening of space and movement through education and employment in the fields of science, engineering, computer programming for women. Here, "the constant negotiation of space, mobility and cultural critique is also game-like because it involves strategy, planning, and sometimes unpredictable and intersecting decisions that recombine in complex ways" (Bogost, 2011:123). As a heterotopic space, *Alien Adventure* reveals rather than hides the social rules that drive how Saudi women negotiate the gendered economy of spatial segregation in a game that couples programmatic

functions that themselves translate into education knowledge that corresponds to direct actions that can be taken to achieve more freedom of expression, public sociability, and mobility. Here, performative game play is coupled to real world action that describes “mechanics that change the state of the world through play actions themselves, rather than by inspiring possible future actions through coercion or reflection” (124).

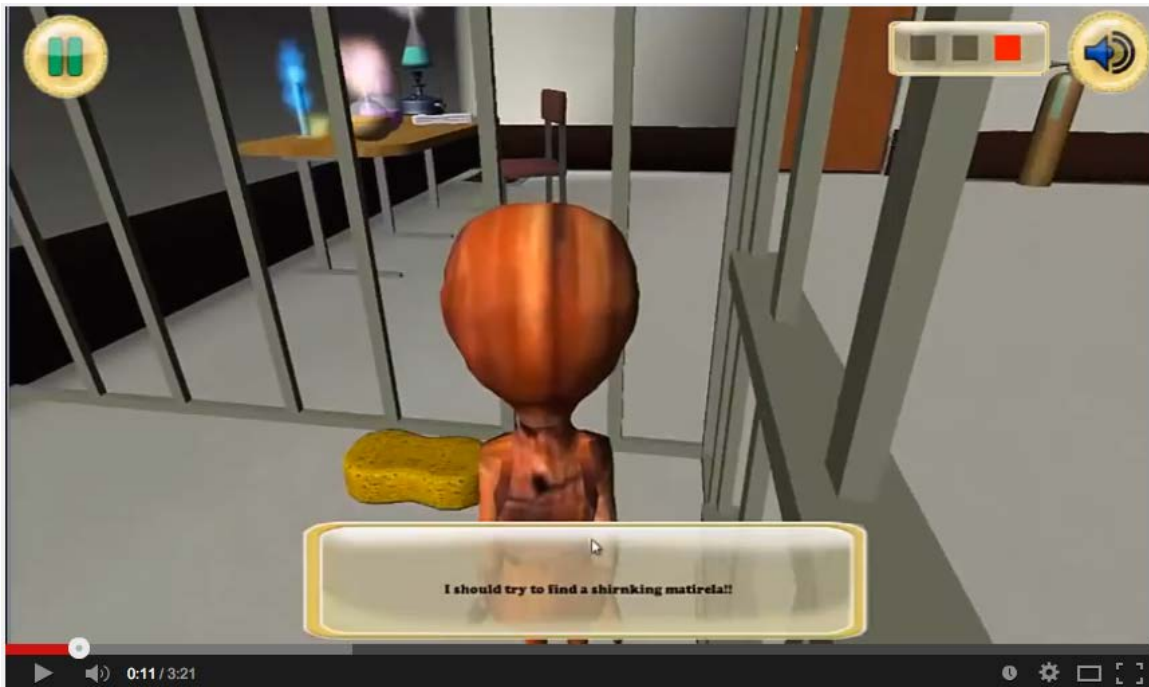


Fig. 26. Author screen shot of *Alien Adventure*. Source: <https://www.youtube.com/watch?v=uysaN8jcHOs>

The incorporation of the theme of science fiction and playing as alien is important for thinking about how science fiction “plays with fundamental male anxieties and displaces it by inventing alternative views of reproduction, thereby manipulating the figure of the female body” (Braidotti, 1996). Gameplay always takes place in a dynamic system of matter that has more immediate effects on the body, which as Fantone notes, “[requires] particular kinds of attention directed at

images, sounds, movements and require specific somatic responses to complex and unpredictable scenarios as they are evaluated and responded to in half a second” (Fantone 2003: 61). Female figures and non-human figures (in this case, the alien), through extraordinary feats undermine conventional understandings of the body (Russo, 1994; cited in Kennedy 2002). Saudi gamers undermine these conventional understandings in the game by playing the alien, but also do so outside of the game by taking up space within a particularly masculinized landscape – as desert adventurers, race car drivers, as survivors of apocalypses, in caves, tombs, combat zones, and in zombie infected laboratories. As transgressive bodies of action, they disturb the natural symbolism of masculine culture (Kennedy, 2002). Gamer girls are instantly ‘othered’ and made recognizable within this location through a combination of on and offline practices and communities, however following Beavis & Charles (2007), this series of interpellations also opens opportunities for these women “to fragment and extend the grounds of intelligibility for being a ‘girl’ gamer” (694). As Salim notes, sex segregation can pose challenges to women’s gaming communities, but once getting over the initial hurdle of acquiring the permissions and resources for their first gaming convention, their identities as ‘women’ have worked to their advantage (Curely, 2013).

One example of this can be found in discussions about GCON by Arab Gaming Geeks, a group of male Saudi-based gamers and game commentators, who discussed the inaugural conference in two one-hour-long podcasts posted to their YouTube channel (Arab Gaming Geeks, 2012). The podcast covered various logistics including the time and location of the conference, commentary about the games that

would be featured at, confirmation that prayers would take place at the convention, and so forth. At one point during the podcast, the hosts humorously noted the irony of women playing *Gran Turismo*, a racing game, while not being permitted to drive in the country. At another point one of the hosts excitedly expressed a desire to disguise himself in an *abaya* so that he could attend the convention. A bit later in the TubeCast, as the commentators glossed over the list of featured games at GCON, they very obviously stumbled over the mention of the game Call of Duty: Black Ops, an ‘advanced warfare’ first person shooter game highly popular among male gamers in the Kingdom. They mumbled to one another, seemingly confused and one finally stated that he didn’t know of any women who played ‘those games’ (even though it was clearly listed as a featured game at the conference) and awkwardly moved on to a different subject. This moment indexes just one example of the transgressive and disruptive potential of women’s bodies playing games, and how the combination of on and offline practices and rituals within these communities present opportunities for the ‘misapplication’ of gendered rituals “which may reformulate a binary gendered framework” (Beavis & Charles 2007: 704).

Gender Ambiguity, Sexual Difference, and Cosplay in Saudi Gamespace

As I have argued in the last chapter, as Saudi women gamers play with non-normative expressions of gendered identity in front of both men (usually online) and women, they collectively renegotiate norms of acceptable behavior. They do so through rituals and utterances that “interpellate one another into a gendered sociality.... [that] accumulates the ‘force of authority’ (Butler 1997: 51; cited in

Beavis & Charles 2007:695). Costume play, or 'cosplay' as it is commonly abbreviated, is a particularly important example of how these women renegotiate gendered sociality in *gamespace*. Cosplay is a form of performance art in which participants dress and act as characters from their favorite video games, film and/or television series, comic book, and other forms of animation, and has become a regularly featured activity at gaming conferences. There are also global competitions and conferences for cosplayers to interact and perform with one another, for instance at the World Cosplay Summit (WSC), which was first held in 2003 (Gn, 2011). Cosplayers, through ritual expressions and utterances create a laboratory of play in which notions of 'otherness' are a central part, creating spaces that mediate new possibilities for experimentation on and with experiences of the body, and the organization of desire in that these desires are articulated in bodies and spaces not specifically designed for them, but that they have appropriated nonetheless.

Cosplay also provides a space and a format for play and performativity with one's gender. Women dress as men, men dress as women, and men and women also dress as elves, monsters, vampires, demons, orcs, and aliens. The requirement of anonymity for many Saudi women gamers online (for instance, in order to avoid accusations of inappropriate or immoral behavior) leads itself to the extension of physical costuming to their online identities beyond gaming conventions, while the extension of online gender play through appropriating fantastic identities online simultaneously extends itself to the realm of physical costuming. These spaces resonate to creation cosplay 'zones' on and offline as part of heterotopic *gamespace*

to include physical bodies, photographs, memes, videos, animation, and personal writing. These 'zones' represent new boundaries of selfhood and sexual pleasure in an amalgam of interconnected profiles and augmented realities that, following Jacobs (2013) analysis of cosplay more generally, allows Saudi women to morph between fictionalized fantasy worlds, physical gatherings, and online appearances (22).

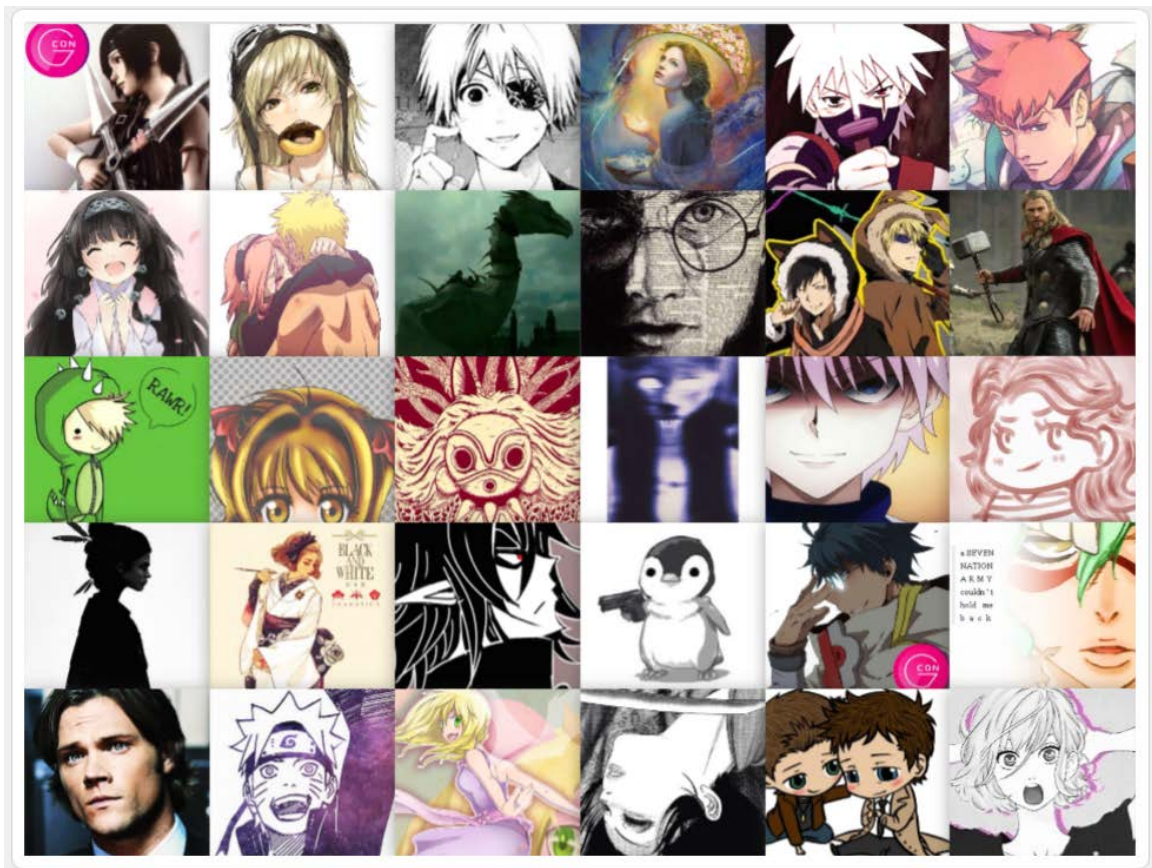


Fig. 27. Author created collage of Saudi women gamer social media profile images. October 18, 2014.

Anne Balsamo (1996) points to several feminist scholars including Haraway (1985; 1990; 1999), Sandra Harding (1986) and Ruth Bleier (1984) who have

theorized how gender is discursively constructed at the level of the body, and how female bodies in particular are marked as sites of 'natural' sexuality and reproduction in discourses of science and technology (Balsamo 1996: 34).

Haraway's cyborg opens up spaces for thinking about how discourses on gender and sexuality can be reconstructed to address the social relations of technology, the discursive construction of the female body, and challenges to male systems of knowledge (32). Moreover, the cyborg asks us to be "attendant to the way the female body is less a singular concept or discoverable unit, and more an arrangement of texts, silences, laws and lines of force" that are articulations of "reading effects, writing practices, relations of power, cultural stagings, material bodies, and socially constructed perceptions" (34-35).

In Donna Haraway's *A Manifesto for Cyborgs*, she describes a 'common language' for women in the figure of the cyborg, a creature that is simultaneously human and machine, inhabiting a world that is both 'natural' and designed at the blurred boundary between social reality and science fiction (cited in Balsamo, 1996: 32). Cyborg sex and replication, Haraway argues, is uncoupled from organic reproduction; it is post-gendered and lacks symbolic attachment pre-Oedipal imaginings, unalienated labor and other 'seductions to organic wholeness' because it has no origins story (33). The cyborg's lack of an original unity, from which the differences between man and women/nature are structured, situates it as an unfamiliar other, one that challenges the stability of human identity (32). As such, the cyborg becomes a kind of 'subversion machine' where the dichotomies between man and woman, human and machine, and nature and culture lose their meaning

entirely: “the cyborg does not dream of community on the model of the organic family...the cyborg would not recognize the Garden of Eden; it is not made of mud and cannot dream of returning to dust” (Haraway 1991: 151).

The cyborg simultaneously embodies the dangers of technology and the possibility of what Balsamo calls “better living through chemistry” (32). Because cyborg identity emerges from the transgressions of boundaries, Balsamo argues that cyborgs “are not like us and yet are just like us” (32-33). Cyborg bodies resist holism, but they are in need of connection with humans and other living creatures, with networks and machines. They recognize and indeed depend on connection across multiple layers of life and activity. It is at the breaching point between these layers that the cyborg emerges in disturbing and pleasurable expressions of liveliness (33). Thus cyborgs emerge through communication networks, and other ‘hybrid discourses’ such as biotechnology and biopolitics (34). Finally, the cyborg alert us to the ways in which identity depends on notions of ‘the other’ that are arbitrary, shifting and ultimately unstable” (32-33). As such, it represents a potent political possibility and alternative, as it has the potential to disrupt the persistent dualisms that have been ‘systemic to the logics and practices of domination of women, people of color, nature, workers, animals.” (Haraway, 1991: 177). It is the cyborg body, according to Haraway, that will ‘stand a chance’ in postmodern culture (176; cited in Balsamo 1996: 33).

Consider, in the light of Haraway’s cyborg and its destabilizing potential, the gamer depicted in Fig. 27 at GCON 2013, here dressed as Naruto Uzamaki from the

popular Japanese manga series *Naruto*. Naruto is a teenage ninja who is not only male, but also has a powerful fox known as Nine-Tails living inside of his body,

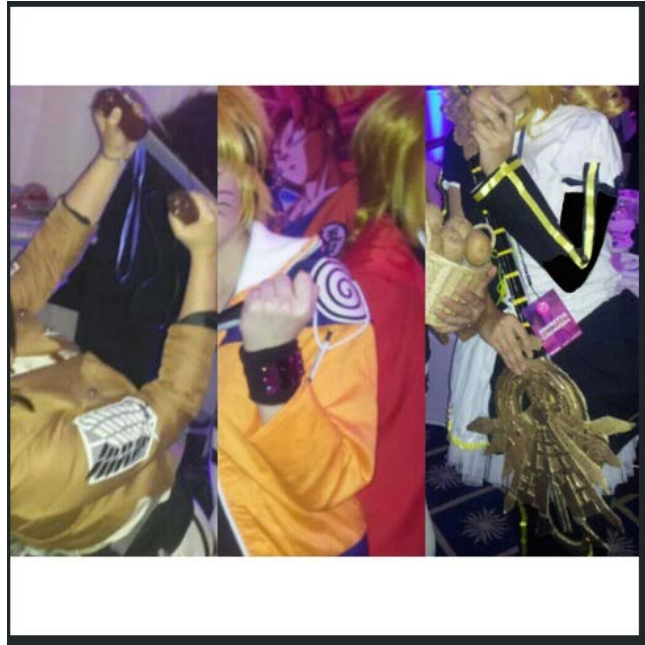


Figure 28. Publicly available images of cosplayers at the GCON 2013 convention.
Source: anonymized. Author screenshot, October 25, 2014.

which gives him supernatural power, agility and strength. In offering materiality to what is essentially an unreal construction of a being that is simultaneously male (Naruto), female (the gamer), animal (the fox), and imbued with supernatural attributes, the gamer participates in a form of cosplay that Bainbridge & Norris (2013) call ‘posthuman drag’ which takes “posthumanism as an emergent ontology, in the sense that a posthuman is one who can become or embody multiple identities.” Lindvall and Melton (1997) describe this type of play as “imbuing living things with a different kind of life” (204). The materialized figure of Naruto links Foucault’s notion of heterotopia to Haraway’s cyborg in Saudi women’s *gamespace* at the boundary of the ‘real’ and the phantasmic. Naruto pictured here is an

example of play with gender difference beyond heteronormative reproduction, which opens up to new affective encounters and new bodily zones within *gamespace*. Rather than directly challenging state and religious sanctioned roles and identities for women, the gamer indexes an ambiguity between appropriate behavior and appropriate identity for women under Wahabi religious nationalism, and shifting cultural identities and desires as a result of global communication and consumerism.

Science fiction and fantasy have always lent themselves to experimental ways of thinking about the impact of technology on sexual difference, to fantasies about the body, and to alternative systems of procreation and birth that give rise to what Barbara Creed (1999) calls the monstrous-feminine. An survey of images from the GCON 2013 conference yielded a number of pictures of women dressed as monstrous *things*. They kept their anonymity either through only featuring pictures of the bodies without faces, or only showing the fully body when masked, which depicted its own otherworldly aesthetic. I was particularly drawn to those women who had reappropriated their *abayas* for the task by incorporating it into their costumes. The playful and provocative reappropriation of the *abaya* into creatures that resists moral and gender signatures deserves more reflection. Through numerous fatwas, three rules for Muslim women's dress in women-only spaces have been promulgated by the Council of Senior 'Ulama: 1) it must "hide female forms" and not attract attention; 2) it must affirm Muslim identity and not "imitate the West"; and 3) it must affirm female identity and not "imitate men" (Le Renard 2014: 108-109). It is important to acknowledge the sociocultural specificity in how the

abaya is worn and what it represents in the region so as not to reify the veil (Al-Qasimi 2010), however it remains an important element of national dress with the Arab Gulf region and in Saudi Arabia, and represents the 'preservation of the self-identity of national culture' positioned in relation to reform, modernization, globalization, and the disproportionate ratio between citizens and non-nationals within the country (49).

In one example (Fig. 28) a conference attendee alters her *abaya* to become the cloak of Hidan, another character from the anime series *Naruto*. Hidan is described as a 'foul mouthed, disrespectful, profane, and maniacal' ninja who defected from and then murdered his village when it became a tourist site. He is a follower of the religion Jashin, which means 'wicked heart or 'evil god,' and requires that all its followers bring destruction and death in exchange for immortality. The cosplayer's make-up depicts Hidan after he has ingested his opponent's blood, which turns his skin black and white to look like a skeleton. After turning, Hidan draws a symbol on the ground in his own blood in a sacrificial ritual, which makes any injury inflicted on Hidan felt by his opponent. Hidan is known to take pleasure in the shared pain that is experienced between himself and his opponent through self-inflicted wounds after the ritual has taken place. Battles end with Hidan piercing himself in the heart, thus inflicting a fatal wound to his opponent as a result of the curse, but not to himself because of his healing abilities.



Fig. 29. Woman cosplaying as Hidan from Naruto at GCON2013. Source: anonymized. Author screenshot, October 22, 2014.

In another notable photograph, a haunting figure lit by a dissonant lavender hue stands alone in an area of the convention hall, draped in a long black garment from head to toe. The picture seems to depict an otherwise ordinary image of a woman dressed in *abaya*, the traditional black apparel worn by Saudi women.



Fig. 30. Still from a video of cosplayer at GCON 2013 as 'No Face'.
Source: anonymized. Author screenshot, October 22, 2014.

However, what is striking about the image is that at the top of the figure a large porcelain-like white mask protrudes from the garment, with a pair hollowed out eyes staring through the observer. The framing of the photograph and the position of the mask lend the figure an unearthly height, and she/it also appears to be floating.

To anyone familiar with Hayao Miyazaki's masterful anime films, the figure is cosplaying as No Face, one of several non-human beings in the film *Spirited Away*.



Fig. 31. Image of woman cosplaying as No Face, GCON 2013. Source: anonymized.
 Fig. 32. Image of No Face from the film, *Spirited Away*. Author screen shot. October 3, 2014.

No Face is a shadowy creature defined not by its form, as it can appear and reappear at will and take on many different variations of embodiment, but rather by kaleidoscopic and boundless intensities and desires. To give an example, at one point No Face attempts to befriend Chihiro, the protagonist of the film, by offering her gold. When she politely refuses, the creature becomes enraged and transforms into a voracious spider-like monster that begins devouring all of the people in the bathhouse. In another scene, No Face exhibits a quiet and gentle introspection, desiring only to sit quietly next to Chihiro on a train. As a provocation, the figure of No Face invites critical reflection on the discursive construction of gendered female bodies and the status of women in Saudi Arabia as it transgresses the binarisms that infuse these constructions – between men and women, good and evil, piety and immorality, access and segregation, and empowerment and submission. No Face is neither good nor evil, neither man nor woman. The figure in the film is shrouded in both a moral and a gendered ambiguity. The ethics it embodies is one that takes the

events of one's existence as "either reducing or promoting full participation in the energies that permeate the world" (Boyd & Nishimura, 2004). In this singular visual moment, the *abaya*, which is the ultimate signification of Islamic piety and the feminine form in Saudi Arabia, is the object from which an ambivalent monster emerges to consume, love, and destroy what it wants.

No Face also represents a kind of Shinto ethical outlook that views events in one's life as either reducing (polluting) or promoting (purifying) one's ability to participate fully in the life energy that permeates the world: when the polluted river (the stink spirit) in the film is cleansed, its mask-like visage says to the film's protagonist through the clear waters, "It feels good" (Boyd & Nishimura, 2004). The creature's aesthetic is borrowed from Japanese Noh theater, a form of classical musical drama that has been performed since the 13th century. Many of the characters in Noh are masked, and men often play female roles and the plays often engage the plights of spirits, ghosts, phantasms and supernatural worlds. Noh masks portray only female or non-human (divine, demonic or animal) characters, usually but can also depict young people and old men (Ishii, 1994). The masks are designed so that slight adjustments in the position of the head can express a number of emotions such as fear or sadness depending on the variance in lighting or the position of the mask to the audience (Ishii, 1994). This adoption of the form of No Face plays off the *abaya*, in that it reterritorializes it from a symbol of piety, chastity and honor into something grotesque, and both morally and ontologically ambiguous.

Gn (2011) notes that while cosplayers might adopt gender and even species ambiguity in their costumes and performances, the physical imitation of a character or an artificial body does not necessarily translate into an expression of a person's individual gender identity, and thus there are certain limitations in reading these animated bodies as materializations of sexual difference (583). Still, cosplay performance represents a particular consumption of the image that requires alternative readings of transgression and deviance, one that Haraway's cyborg provides some insight into. In these examples, both women exploit the inherent similarity of the *abaya* in terms of its length and color, however they also point to the numerous ways in which *abayas* can be distinguished from one another in terms of style (Al-Qasimi 2010: 409). The refashioning of national dress, argues Kandiyoti (1988) is a form of 'passive resistance', where the necessary qualities of the *abaya* are maintained (that the garment is loose fitting; that it does not mimic infidel women's (*kafirah*) style of clothing; that it is all covering; that it lacks overtly feminine adornment) while still subverting the ideological function of veiling. Consider in this context Donna Haraway's term 'figurations' when describing the conceptual and metaphoric value of the cyborg posits bodies as both 'real' in the everyday ordinary sense, but also as embodying "simultaneous figurations involved in a kind of narrative interpellation into ways of living in the world" (Haraway & Goodeve 1999: 140) that express feminist forms of knowledge that are not "caught in a mimetic relationship to dominant scientific discourse" (Braidotti 2011: 75). Gamespace enables the mediation of these convergences that is, in some ways seen as less overtly controversial because of its gesturing toward the unreal or fantastic,

for instance the phantom who travels between worlds, or the murderous immortal. As Gn notes, these are not overt expressions of gender identity per se, however they are expressions of the divergent paths, patterns and pleasures of play that reveal a subversive form of micropolitics exceed normative expressions of gender that do not necessarily require the conscious expression of the wearer.

Conclusion

The multiple nomadic paths of reflection and practice that these gamers traverse inspire new ways of thinking about the relationship between bodily materiality and technology within *gamespace*. In this chapter I have tried to show how the growing subculture of women gamers within Saudi Arabia present multiple ways to transgress gender-based constraints on movement, communication, and access to space on and offline. I have also tried to depict their complex feminine agencies and the emergent social mutations within the Peninsula in productively positive ways, rather than look at their activities as simply liberating, entrepreneurial, or simply a form of passive leisure. I have found Rosi Braidotti's work on processes of hybrid transformations between women, machines and monsters, and Donna Haraway's work on cyborgs friendly traveling companions as they point to a systematic displacement of the boundaries of difference from the 'others' who have traditionally acted as "empirical referents" for liberal feminism (Braidotti, 2006). These 'gamer girls' – a well-organized and transnationally linked group of players and developers – play at the boundaries of different ontological categories, between "human/non-human, the organic other/inorganic other,

flesh/metal, the born/the manufactured” (2006). The technology at the heart of these processes recombine these categories into a “powerfully posthuman mix” promoting provocative ways of rethinking gendered agency through a field of complex micro-political interventions (2006). Through these interventions, these gamers are able to transgress sexually segregated spaces while simultaneously articulating an alternative moral regime for gaming, religion and citizenship through discourses of creativity, access, and piety instead of the language of rights in order to create relations of state accountability to women in the form of jobs, education, and access to space.

Conclusion

In the wake of the recent Arab uprisings, there emerged a narrative according to which women were being "remade" (and liberated) through digital media and communications technologies. In this dissertation, I have examined critically that narrative, and sought to advance a more nuanced account of the relationship between technology, gender, and social power. I have tried to highlight the ambivalent effects of networked communication and the rich and multi-scalar appropriations of these technologies by a diverse range of women. At this particular technological moment, I believe an interdisciplinary approach is most appropriate: it provides a variety of conceptual languages and modes of inquiry best suited to acknowledging the full spectrum of experience and moral convention in the project of ennobling human existence. This cannot be achieved through universalist narratives about what digital media does or provides, or how it should be used.

Discourse analysis can show us instead the specific ways in which these narratives function to assert all-too-familiar discourses about the technological and moral superiority of the 'West' in relation to the 'Middle East' (categories that have problematic explanatory value). I have also argued that it is equally important to think about the agentic capacities of the technologies themselves not in any deterministic sense, but as a way to open up the problematic introduced in the beginning of this project, that is, using technology toward its most inclusive end.

It would be impossible to include all the engagements that fall within this problematic of technology, gender, and politics, and the range of class, religious, national, sexual, and material forces involved. The ones that I have addressed represent only a subset, selected in part because of my own subject position. I lived in Egypt for several weeks in 2006, and like many who were following the 25 January Revolution with great awe and enthusiasm, I was both unsettled by and cautiously critical of the inundation of stories that began to emerge about women being sexually assaulted for protesting in public, and the invocation of local "culture" to explain this violence. This led to my investigation of the Harassmap project, which examines how sexual violence in Egypt has since 2010 become increasingly figured as a gendered human security problem. I tried to show how, through a series of technological interventions, Harassmap attempts to create new forms of public consciousness about sexual violence in the country within a framework that places 'culture' at the root cause of criminal violence. The challenge here was to show that one could be critical of violence against women, while also being critical of how Harassmap mobilizes older epics of racial and sexual

knowledge through its use of spatial information technologies and crowdmapping in its attempt to police Egypt's urban spaces.

My chapter on Aliaa Elmahdy and Amina Sboui was inspired by a disquiet in the face of my own desire to consider these women's bodily interventions as counter-actions to patriarchy in a revolutionary moment, as making strong claims about the rights to their own bodies, and so forth. Like many who were writing about these women at the time, to me the question of 'why' they posed naked online was important because it was a necessary component to identifying their actions as 'resistant.' My way of addressing this was to re-narrate their interventions through the question of technological mediation and relationality. Why was it that we could read stories about their 'heroism' in defying religious conservatism and patriarchy in the Arab world through exposing their breasts online, but could not see their breasts because they were considered mature or inappropriate content? How did images travel, what images did they travel with and why, and where did they go when they are diverted from 'public' interfaces? Asking these questions led me to a different problematic altogether – the massive material labor force of content moderation in the global South.

Finally, I wrote about Saudi women gamers in part as a response to claims that the Gulf States were relatively untouched by the massive uprisings that swept the rest of the region, and the implication that this was somehow a consequence of religious ultra-conservatism, or a disinterest in political restructuring because of state-sponsored clientelism. In addition to the factual inaccuracy of these claims, they also ignored a range of micropolitical interventions in these more conservative

Islamic states, and how women within Saudi society have for generations pursued creative ways to assert agency and even autonomy in complex polities. Saudi female gaming communities, on my reading, represent one example of how the uprisings have inspired a range of global desires outside more overt forms of political contestation, and how technology mediates these desires in the context of gender, religion, sexual fantasy, and global consumerism.

The concept of the interface - as an object, a relationship, and a method - has been important to this project for mapping the different historical, cultural, and political encounters between myself and my subjects, both human and non-human. I have tried to write a relational account of these engagements rather than postulate the subjective experiences of the women I discuss and make identity claims on their behalf. My wager has been that close attention to the workings and effects of technological apparatuses can help to challenge ideological interpretations of contemporary Internet culture and its implications for global communication. My focus on the concept of the interface has also allowed me in different sections of this text, and as part of this project of demystification, to broaden my inclusion of *things* that matter to the situations and people that I have described. The spaces I discuss are social spaces, and to this end they are places populated not only by people, but by data, algorithms, computers, gaming engines, spambots, and so forth. Part of my argument has been to demonstrate that technological processes are already acting on 'us' whether we acknowledge them or not. Moreover, because it is not always obvious just how they operate on us or what new power differentials are being produced, an interdisciplinary, critical analysis of the conjunctions between

technology, society, and politics is needed. My own critical analysis of these conjunctions has attempted to engage both the material expressions of computational media and the political aims of an antiracist, anticolonial feminism.

Many scholars have expressed concern that an emphasis on the agentic capacity of technology leads to techno-centrism or techno-determinism, in other words, it creates anxiety about analyses that highlight the power of technologies in the production of mediated content. The worry is the occlusion of the effects upon real, live, sentient human bodies. I have tried to show, however, that attention to forms of technological agency is not adverse to humanist concerns. Looking at bodies and computers together in relationality yields an understanding of both as contiguous formations rather than simply as discrete opponents. There is, as Balsamo notes, a "continuum rather than a "dichotomy" between the human and the technological, a "relationship of degree. Human identity, according to this schema, is understood as a value somewhere between the two (idealized) ends" (136).

This dissertation has focused on how everyday objects of technological mediation (Google Maps, Twitter, TED talks, smartphones, crowdsourcing, email, blogs, messaging, video games) are becoming the new language of expertise, and, simultaneously, new knowledges of gender and race about the Arab world. Part of the appeal of these forms of mediation is that they are seen as either operating outside of the realm of politics, or alternatively, as embodying a kind of pure democratic ethos -- both themes that I have challenged. My method has been to draw upon discourse analysis, social theory, media theory, and digital ethnography which focused on routines, habits and flows of online communication, and it leaves

open how more conventional ethnographic methods might also contribute to an inquiry that acknowledges the political work of devices, programs, data and so forth. While I would resist the notion that face-to-face interaction or physical observation is more 'real' or authentic, it surely would add another dimension to the analyses offered here. Finally, this dissertation has not put forward a prescriptive set of claims about the 'woman question' in the Middle East. This is because my goal instead has been to examine how technological narratives function to affirm or disavow certain discourses about 'rights' and 'oppression,' how human-computer interfacings engender certain kinds of knowledge embedded with and supportive of structures of hierarchy and exploitation, and how computational models, with their implicit form of power, have infiltrated more and more aspects of human communication and human life.

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Curriculum Vitae

Nicole Sunday Grove was born on June 5, 1977 in Oak Lawn, Illinois. She received her B.A. with Honors in Politics from New York University in 2008 and her PhD in Political Science from Johns Hopkins University in 2015. Her research examines the racial and gendered dynamics of digital knowledge production about sexual violence, human security, and women's rights in the Middle East. Beyond her dissertation research. She currently holds a position as a Lecturer at the University of Hawai'i at Manoa in the Department of Political Science where she teaches courses on Middle East politics, contemporary issues in gender and Islam, US foreign policy, and digital politics and culture with an emphasis on the global South. Her work has been published in the Journal of Critical Globalization Studies.